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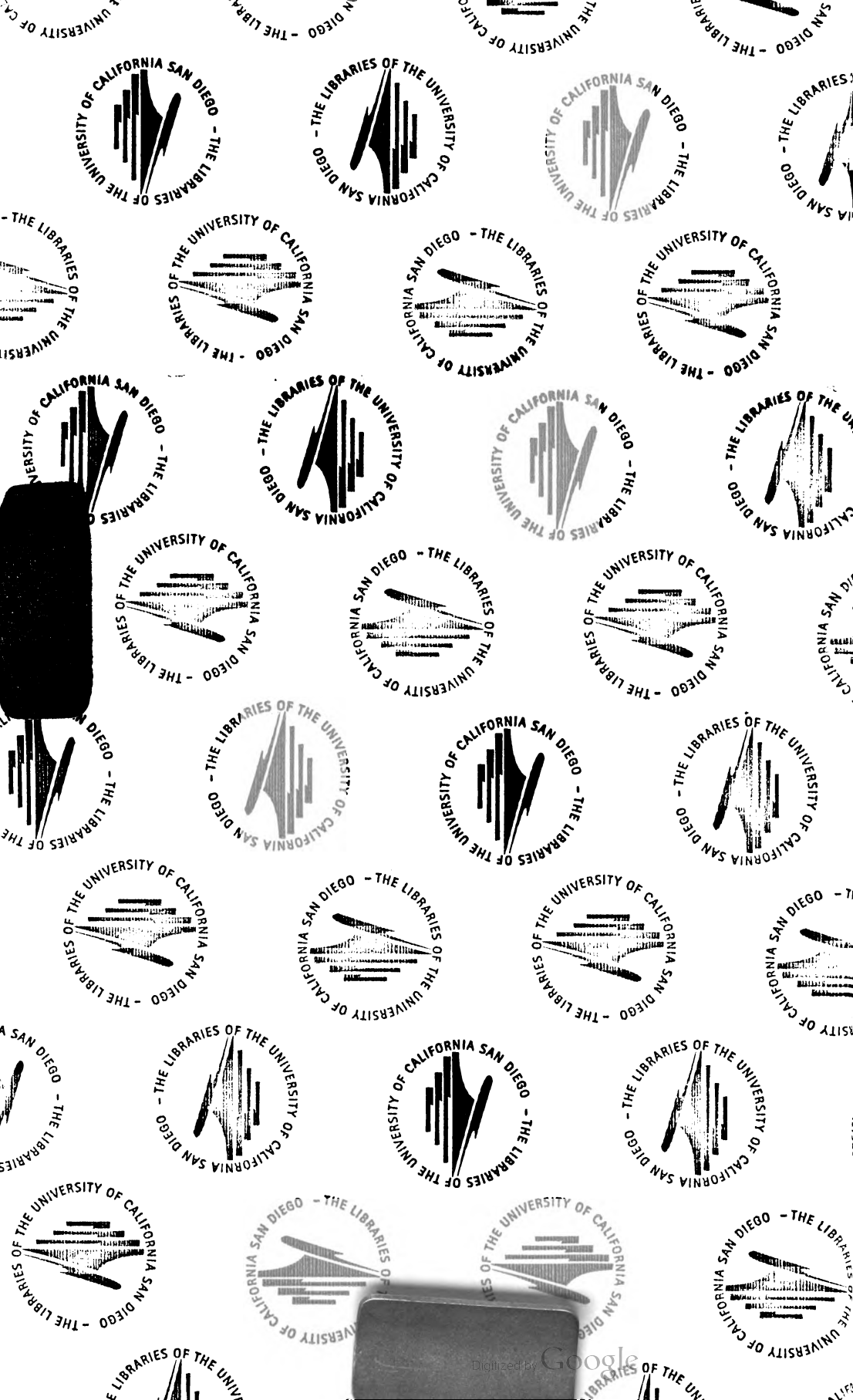
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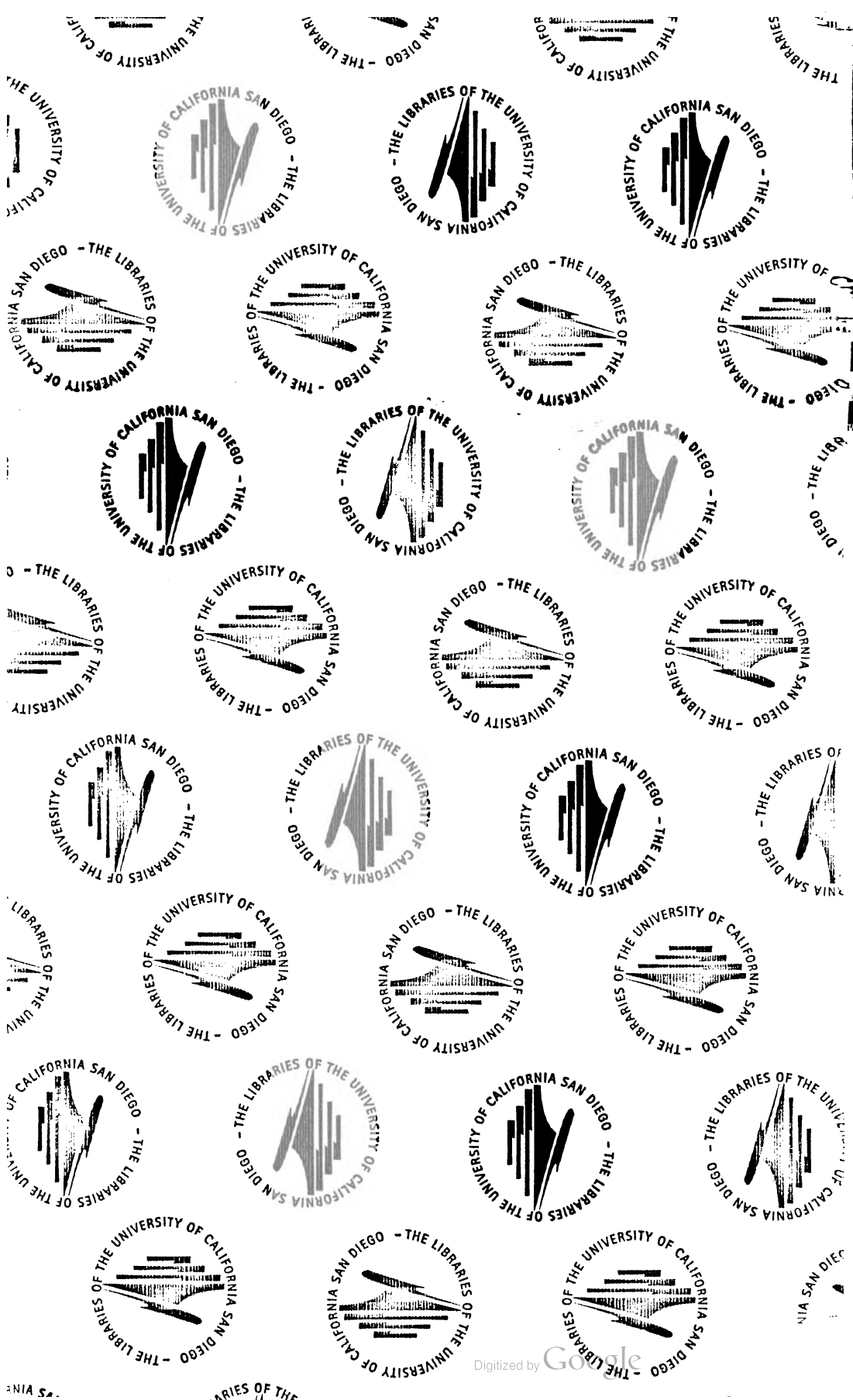
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1969

SUPPL. 13

S. I. O.







24s

SUPPLEMENT No 13—1989

TO

BLACK SEA PILOT

(Eleventh Edition, 1969)

CORRECTED TO 11th FEBRUARY, 1989

Whenever reference is made to the Pilot this
Supplement and Section IV of the weekly editions
of Admiralty Notices to Mariners must be consulted

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11th ed.

1969

SUPPLEMENT 13

PREFACE

Supplement No. 13, 1989, corrected to Weekly Edition No. 5 of Admiralty Notices to Mariners, dated 11th February, 1989, has been prepared by Commander R. Perceval Maxwell, RN, from information received since the publication of Black Sea Pilot, 11th Edition, 1969. Supplement No. 12, 1986, is hereby cancelled.

For later information see the monthly list of Corrections to Sailing Directions given in Section IV of the weekly editions of Notices to Mariners.

Notices to Mariners should also be consulted for the monthly list of temporary and preliminary notices in force; and for the list of navigational warnings in force.

Alterations and additions since the previous supplement are marked by a bold line in the margin.

R. O. MORRIS

Rear-Admiral

HYDROGRAPHER OF THE NAVY

*Hydrographic Department
Ministry of Defence
Taunton
Somerset, TA1 2DN
England
11th February, 1989*

Pink pages

Replace by:

Explanatory Notes

Admiralty Sailing Directions amplify charted detail and contain information needed for safe navigation which is not available from Admiralty Charts, or other hydrographic publications. They are intended to be read in conjunction with the charts quoted in the text.

Sailing Directions are kept up to date by supplements published at intervals of 1½ to 2 years, each new supplement cancelling the previous one. In addition a small number of Notices to Mariners are published specially to correct Sailing Directions for important information which cannot await the next supplement. A list of such notices in force is published at the end of each month in the weekly edition of Admiralty Notices to Mariners. Those still in force at the end of the year are reprinted in the Annual Summary of Admiralty Notices to Mariners.

This volume should not be used without reference to the latest supplement and those Notices to Mariners published specially to correct Sailing Directions.

References to hydrographic and other publications:—

The Mariner's Handbook gives general information affecting navigation and is complementary to this volume.

Ocean Passages for the World and *Routeing Charts* contain ocean routeing information and should be consulted for other than coastal passages.

Admiralty List of Lights should be consulted for details of lights, light-vessels, lanbys and fog signals as these are not fully described in this volume.

Admiralty List of Radio Signals should be consulted for information relating to coast and port radio stations, radio details of pilotage services, radiobeacons and direction finding stations, meteorological services, and radio navigational aids as these are only referred to briefly in this volume.

Annual Summary of Admiralty Notices to Mariners contain in addition to the temporary and preliminary notices, and notices affecting Sailing Directions only in force, a number of notices giving information of a permanent nature covering radio messages and navigational warnings, distress and rescue at sea, exercise areas, and areas dangerous due to mines which have not already been incorporated into the appropriate charts and Sailing Directions.

The International Code of Signals should be consulted for details of distress and life saving signals, international ice-breaker signals as well as international flag signals.

Remarks on subject matter—

Buoys are generally described in detail only where they have special navigational significance, or where the scale of the chart is too small to show all the details clearly.

Chart references in the text normally refer to the largest Admiralty chart but occasionally a smaller scale chart may be quoted where its use is more appropriate.

Firing, practice and exercise areas. Except for submarine exercise areas, details of firing, practice and exercise areas are not normally mentioned in Sailing Directions, but signals and buoys used in connection with these areas are sometimes mentioned if significant for navigation. Attention is invited to the Annual Notice to Mariners on this subject. *See also* page 14 and Appendix V for U.S.S.R. Regulated Areas.

Names have been taken from the most authoritative source. Where an obsolete name still appears on the chart it is given in brackets following the proper name

at the principal description of the feature in the text and where the name is first mentioned.

Tidal information relating to the daily vertical movements of the water is not given; for this the *Admiralty Tide Tables* should be consulted. Changes in water level of an abnormal nature are mentioned.

Wreck information is included where drying or submerged wrecks are relatively permanent features having significance for navigation or anchoring.

Units and terminology used in this volume are:—

Latitude and Longitude given in brackets are approximate and are taken from the chart quoted.

Bearings and directions are referred to the true compass and when given in degrees are reckoned clockwise from 000° (North) to 359°. The bearings of all objects, alignments and light sectors are given as seen from seaward. Courses always refer to the course to be made good.

Winds are described by the direction from which they blow.

Tidal streams and currents are described by the direction towards which they flow.

Distances are expressed in sea miles of 60 to a degree of latitude and subdivided into cables of one tenth of a sea mile.

Depths are given below chart datum, except where otherwise stated.

Heights of objects refer in the height of the structure above the ground and is invariably expressed as "...m in height".

Elevations, as distinct from heights, are given above MHWS or MHHW, whichever is quoted in *Admiralty Tide Tables*, and expressed as "an elevation of ...m". However, the elevation of natural features such as hills may alternatively be expressed as "...m high", since in this case there can be no confusion between elevation and height.

Metric units are given in brackets after British units for all measurements printed on a feet/fathoms chart. Other measurements are given in metres in this supplement when it is necessary or convenient to amend them.

Time is expressed in the four figure notation beginning at midnight and is given in local time unless otherwise stated. Details of local time kept will be found in *Admiralty List of Radio Signals*.

Bands is the word used to indicate horizontal marking.

Stripes is the word used to indicate vertical or diagonal marking.

Conspicuous objects are those which stand out clearly from the background or other objects and are easily identifiable from a few miles offshore in normal visibility. They will usually be marked "conspic" on the chart if the scale is large enough.

Prominent objects are those which are easily identifiable, but do not justify being classified as conspicuous.

iii

Para. 4 2 *Replace by:*

...prepared and supplied by the General Council of British Shipping.

vii

View No. 2 *For* "Midye" *read* "Kıyıöy"

xxi

Insert new page xxi.

TABLE FOR THE transliteration OF RUSSIAN GEOGRAPHICAL NAMES INCLUDING THE CYRILLIC MORSE CODE

Russian (properly "Great Russian") is the principal Slavonic language using the Cyrillic alphabet, being largely based on Greek, but including some letters of unknown, possibly Eastern origin.

The Permanent Committee on Geographical Names (PCGN), in agreement with the United States Board of Geographical Names (USBGN), approved on 19th May, 1948, the use of the following table for transliteration from Russian into English. Contrary to usual PCGN/USBGN practice, this table is based on how Russian words are spelt, not on how they are pronounced. It therefore has the advantage over previous tables of mechanical applicability.

The Cyrillic Morse Code symbol is shown for each transliteration.

Print	Russian Script	Transliteration	Cyrillic Morse Code symbol
А а	<i>А А а</i>	a	. —
Б б	<i>Б Б б</i>	b	— . . .
В в	<i>В В в</i>	v	. — —
Г г	<i>Г Г г</i>	g	— — .
Д д	<i>Д Д д</i>	d	— . .
Е е	<i>Е е</i>	ye, e ²	.
Ж ж	<i>Ж ж ж</i>	zh	. . . —
З з	<i>З з з</i>	z	— — . .
И и	<i>И И и</i>	i	. .
Й' й	<i>Й</i>	y	. — — —
К к	<i>К к</i>	k	— . —
Л л	<i>Л Л л</i>	l	. — . .
М м	<i>М м</i>	m	— —
Н н	<i>Н Н н</i>	n	— .
О о	<i>О о</i>	o	— — —
П п	<i>П П п</i>	p	. — — .
Р р	<i>Р Р р</i>	r	. — .
С с	<i>С с</i>	s	. . .
Т т	<i>Т Т т</i>	t	—
У у	<i>У у</i>	u	. . —
Ф ф	<i>Ф ф ф</i>	f	. . — .
Х х	<i>Х х</i>	kh	. . . .

Russian		Trans- literation	Cyrillic Morse Code symbol
Print	Script		
Ц ц	Ц ц ц	ts	— . — .
Ч ч	Ч ч ч	ch	— — — .
Ш ш	Ш ш	sh	— — — —
Щ щ	Щ щ	shch	— — . —
Ъ ³ ъ	Ъ	„	. — — . — .
Ы ¹ ы	Ы ы	y	— . — —
Ь ь	Ь ь	'	— . . —
Э э	Э э	e	. . — . .
Ю ю	Ю ю	yu	. . — —
Я я	Я я	ya	. — . —

Note:¹Seldom initial except in words of non-Russian origin.

²yc initially, after vowels, and after Ъ, Ь ; e elsewhere; when written as ѣ in Russian, transliterate as yě or ě.

³Ъ is sometimes written as ' in Russian, but should always be transliterated as „.

2

25-28 *Replace by:*

After many years of unstable government a National Security Council composed of senior military personnel assumed control in 1980. Under a new constitution approved in 1982 there is to be a gradual return to democratic civilian rule.

37-38 *Replace by:*

The census population of Turkey in 1980 was 45 356 000. The population of Ankara, in 1980 was 2 000 000.

54-55 *Replace by:*

...values of 5 and 10 *Lira*: notes are of values 10, 20, 50, 100, 500, 1000, 5000 and 10 000 *Lira*.

3

32 *Replace by:*

National days.—April 23rd (Independence day) and October 29th (Republic day).

35 *Replace by:*

There is a British Consulate-General at Istanbul.

Address:—

Mesrutiyet Caddesi No. 34

Tepebashi, Beyoglu,

Istanbul.

48-49 *Replace by:*

...(110 911·5 square km) and, at the census in 1978, the population was 8 800 000.

51 *Replace by:*

...country had a population, in 1978, of over 1 million.

4

18-23 *Replace by:*

Currency.—Weights and measures.—The unit of currency is the *lev*, divided into 100 *stotinki*. The following denominations are in circulation: notes 1, 2, 5, 10 and 20 *leva*; coins 1, 2, 5 *leva*, 1, 2, 5, 10, 20 and 50 *stotinki*.

34 *Replace by:*

National days.—September 9th and 10th.

37 *Replace by:*

There is a consular office at the embassy.

Address: Boulevard Marshal Tolbukhin 65-67,

Sofia

38 For “**RUMANIA**” read “**ROMANIA**”

51-52 *Replace by:*

...square miles (237 429 square km) with a total population in 1977, of 21 500 000.

55 *Replace by:*

...which had a population, in 1977, of 1 930 000.

5

23-30 *Replace by:*

Currency.—Weights and measures.—The unit of currency is the *leu*, plural *lei*, which is divided into 100 *bani*. The denominations of currency in circulation are: notes 5, 10, 25, 50 and 100 *lei*; coins 1, 3, 5 *lei*, 5, 15 and 25 *bani*.

45 *Replace by:*

There is a consular office at the embassy.

Address: 24 Strada Jules Michelet, 70154

Bucharest.

6

23-27 *Replace by:*

General remarks.—The Soviet Union, with a total area, in 1975, of 22 402 200 square kms, is by far the largest state in the world. The 1979 population was 262 000 000, and that of Moscow, the capital, 7 635 000.

29-30 *Replace by:*

...there is growing urbanisation and in 1973 there were 45 towns with a population of over 500 000 as opposed to 26 in 1964.

51 *Replace by:*

...south, which was completed in 1952. The canal can be used by the largest river craft and small sea-going vessels of up to about 4 000 tons and 12 feet (3^m7) draught. It passes through about a dozen locks and three lakes, which make up almost half the overall length.

In October, 1964, work was...

55 *Replace by:*

Railways.—There was a total of 137 500 kms of railways in 1976, which carried 70% of all freight.

7

1-18 *Replace by:*

Air lines.—The national airline, Aeroflot, is the world's largest and the sole operator of all internal services. In 1974 there was a total of over 800 000 kms

of internal air routes. External services are maintained with 65 countries and the Soviet Union is also served by most of the major foreign airlines.

Currency.—Weights and measures.—The unit of currency is the *rouble*, which is divided into 100 *kopeks*. The following denominations are in circulation:—

Notes: 1, 3, 5, 10, 25, 50, 100 *roubles*

Coins: (silver colour) 1 *rouble*; 10, 15, 20, 50 *kopeks*
(copper colour) 1, 2, 3, 5 *kopeks*

30–31 *Replace by:*

Public holidays.—New Year's Day, Woman's Day (March 8th), International Labour Days (May 1st and 2nd), Victory Day (May 9th, Constitution Day (October 7th) and Anniversary of the October Revolution (November 7th).

35 *Add:*

Address: Moscow 72,

Naberezhnaya Morisa Toreza 14.

8

49 *Add:* The Black Sea was originally a fresh-water lake, and attained its present salinity only a few dozen centuries ago. Its flora and fauna consists of a relatively few marine or estuarine species that have managed to invade the Black Sea from the Mediterranean. Many brackish-water species exist in other parts of the world which could thrive in the Black Sea if accidentally introduced. However, without the predators and parasites that now limit their numbers in their native waters, some introduced species could become harmful pests if unregulated populations were allowed to develop in the Black Sea. Accidental transplantation of species between oceans can occur by transportation in water ballast compartments of vessels. Masters of ships bound for the Black Sea should, if practicable, ensure that any water ballast taken on in a coastal port outside the Mediterranean is replaced by Mediterranean open sea water.

9

15 *Add:*

Offshore buoys.—Mooring buoys, with no navigational significance, are laid well offshore in many parts of the Black Sea, particularly between Constanța and the Crimea. Their positions are frequently changed.

10

26 *For* "Kilya koyu" *read* "Poyraz koyu"

11

9 *Add:* It has been reported (1975) that, due to manoeuvring difficulties, VLCCs bound for ports in İzmit Körfezi are not required to stop off Çanakkale to obtain a pratique, provided permission for this exemption has been granted by the Quarantine officer at Çanakkale.

12

11–47 *Replace by:*

WARNING.—Attention is called to the change in the navigation rules for the Bosphorus which became effective in May 1982. These changes cancel the former rules whereby, in the Bosphorus, vessels kept to the European side of the channel when north-bound and to the Asiatic side when south bound. Vessels now keep to the starboard side of the channel in both the Dardanelles and the Bosphorus. See "Navigation Rules" below.

Pilotage.—Pilotage through the Dardanelles and the Bosphorus is not compulsory except as below but is advisable, particularly at night, in bad weather or low visibility, and for all large vessels. The constricted passages of the Dardanelles and the Bosphorus, containing a high density of traffic and strong currents, can make navigation hazardous, and the multitude of shore lights, which tend to obscure the navigational aids and low-power anchor lights, add to the navigational problems.

Pilotage is compulsory:

- (a) for all Turkish vessels of over 500 gross tons and all foreign vessels bound for or leaving ports or anchorages in the Bosphorus, and Sea of Marmara;
- (b) for foreign vessels passing through the Dardanelles bound for Turkish ports;
- (c) in Izmit Körfezi. *See* page 129
- (d) Canakkale. *See* page 86

Due to the heavy demand for pilots, at least 24 hours prior notice should be given. Cables should be addressed to Mehmetçik Pilots if eastbound from the Aegean Sea or Kavak Pilots if westbound from the Black Sea.

Pilotage services.—*Northbound passage through Dardanelles, Sea of Marmara and Bosphorus.*

Pilot station. Mehmetçik ($40^{\circ} 02' \cdot 5$ N., $26^{\circ} 11' \cdot 5$ E.). Pilot embarks $1\frac{1}{2}$ miles S. of station, as indicated on the chart or off Kepez Koyu ($40^{\circ} 05' \cdot 1$ N., $26^{\circ} 22' \cdot 2$ E.) in bad weather. Pilots stand down in Sea of Marmara and for vessels entering the Black Sea, disembarks off Tellitabya Burnu ($41^{\circ} 10' \cdot 5$ N., $29^{\circ} 04' \cdot 4$ E.).

Port of Istanbul and northbound passage through Bosphorus.

- | Pilot station. Güney Girişi ($41^{\circ} 00' \cdot 7$ N., $29^{\circ} 00' \cdot 6$ E.). Pilot embarks off S. Entrance to Bosphorus S.W. of Ahirkapi Burnu ($41^{\circ} 00' \cdot 1$ N., $28^{\circ} 59' \cdot 1$ E.). *See* page 153.

Southbound passage through Bosphorus, Sea of Marmara and Dardanelles.

- | Pilot station. Kuzey Girişi ($41^{\circ} 10' \cdot 6$ N., $29^{\circ} 04' \cdot 4$ E.). Pilots embark between Cali Burnu ($41^{\circ} 12' \cdot 1$ N., $29^{\circ} 07' \cdot 1$ E.) and Filburnu (1 mile E.S.E.), as indicated on the chart. Vessels are advised to confirm the availability of a pilot with the pilot station before crossing the line joining Rumeli ($41^{\circ} 14' \cdot 1$ N., $29^{\circ} 07' \cdot 1$ E.) and Anadolu. An approach course of S.W. for 7 miles to seaward of this line will avoid the loss of communications caused by high cliffs.

There are control formalities to be carried out, normally underway, at Canakkale (eastbound) or Büyükdere (westbound); *see* page 11. Officials come alongside by launch, but do not normally board.

Navigation rules.—In the Dardanelles and in the Bosphorus, vessels should, in accordance with Rule 9 of the *International Regulations for Preventing Collisions at Sea* (1972), keep to that side of mid-channel which lies on their *starboard* side, taking care to make the sound signals in accordance with Rule 34(e) of the above regulations when approaching the narrows off Canakkale and the bend at Nara.

52 *Add:* During transit of the Bosphorus vessels should not overtake other vessels unless forced to do so, in any case they must not cross the centre line of the navigable channel.

54-56 *Delete*

13

2-5 *Delete*

22 *For* “may” *read* “should as a rule”

44 *Add:*

Yacht regulations.—Yachts in Turkish waters require normal ship’s papers and may remain for up to three months without obtaining a triptique. On arrival in Turkish waters yachts should first proceed to the nearest port of entry for clearance—i.e. to Çanakkale, Bandırma, or Istanbul.

46-52 *Replace by:*

Degaussing.—The Soviet Naval Command recommends that all ships sailing to...

14

14 Add: Recommended routes and approach courses.—There are recommended routes between, and approach courses to, the more important U.S.S.R. ports. Where details are known, they are given in the body of this volume. Mariners are advised to keep to these recommended tracks, which in places pass through former mined areas.

Traffic separation schemes.—Traffic separation lanes have been established in the approaches to Burgas, Varna, Odessa, Il'ichevsk and Novorossiysk; southward of Mys Sarych, the southernmost point of the Crimea; in the southern and northern approaches to Kerchenskiy proliv; and south-eastward of Berdyanskaya kosa in the Sea of Azov. One-way and two-way recommended routes connect these areas with each other and with Zhdanov, Yalta, and Dnestrovskiy liman. Details are shown on the charts.

Apart from the southern approaches to Kerchenskiy proliv, the approaches to the ports of Odessa and Il'ichevsk, and the route between Odessa and Il'ichevsk, none of the Traffic Separation schemes described in this volume are IMO adopted, but the U.S.S.R. authorities advise that the principles for the use of routing systems defined in Rule 10 of the International Regulations for Preventing Collisions at Sea apply.

Ships should enter and leave the lanes at the charted extremities, but when it is necessary to enter from the side this should be done at an acute angle. There is no need to follow the positions of the arrows on the chart; the full width of the zones may be used. Ships should not enter or cross the separation zone or line except in emergency. Ships which have to cross the lanes should do so at as broad an angle as possible. Use of the lanes is not compulsory but in the interests of safety all mariners are urged to follow them.

U.S.S.R. Regulated areas.—U.S.S.R. Regulated areas include areas where navigation, fishing or anchoring is prohibited; such areas are normally charted and are described in Sailing Directions. U.S.S.R. Regulated areas also include areas where navigation is only periodically prohibited and areas where navigation is periodically declared to be dangerous; such areas are not charted, but full details are given in an appendix to the appropriate volume of Sailing Directions. See Appendix V.

Areas in which navigation is periodically prohibited lie within U.S.S.R. territorial waters; radio warning is given of the date on which such an area becomes prohibited for navigation.

Areas periodically declared dangerous for navigation, which may also include various firing, danger and exercise areas, lie partly or wholly outside U.S.S.R. territorial waters; radio warning is given of the date on which such an area becomes dangerous for navigation.

When necessary to establish special control of navigation in specific areas, the latter are designated Fortified zones by the U.S.S.R. authorities. Prior permission must be obtained to enter or leave such areas, and pilotage through them is compulsory. Special regulations are in force in these zones, and the pilot's instructions concerning them must be strictly complied with. Navigation through these zones in fog is prohibited.

Changes to U.S.S.R. Regulated areas are announced by PRIPS or NAVIP. Similar warnings may occasionally be broadcast concerning other areas not previously designated as periodically prohibited to navigation.

Details of PRIPS and NAVIP radio broadcasts are given in *Admiralty List of Radio Signals*. Vol. 5.

The U.S.S.R. authorities place responsibility for the violation of the limits of a Regulated area on the ship's master.

Pipelines.—In order to avoid damage, protection zones have been established 100m each side of all pipelines in U.S.S.R. waters. Within these zones anchoring, trailing an anchor, trawling, dredging or any operation which could endanger a pipeline is prohibited.

Regulations for foreign naval vessels navigating and remaining in the territorial or internal waters of the U.S.S.R. or visiting U.S.S.R. ports. Foreign naval vessels intending to enter waters of the U.S.S.R. or visit U.S.S.R. ports should obtain a copy of *Regulations for foreign naval vessels navigating and remaining in the territorial or internal waters of the U.S.S.R. or visiting U.S.S.R. ports*. These regulations are published as a U.S.S.R. Annual Notice to Mariners.

Warning Signals from U.S.S.R. naval vessels to foreign naval vessels.

The following signals are used by U.S.S.R. naval vessels to warn foreign naval vessels that they have violated the *Regulations for foreign naval vessels navigating and remaining in the territorial or internal waters of the U.S.S.R. or visiting U.S.S.R. ports*.

1. Warning Signals to foreign surface naval vessels and submarines on the surface.

<i>Signal</i>	<i>Meaning</i>
SNG	You have violated the state border of the U.S.S.R. I demand that you leave U.S.S.R. waters immediately.
SNO	I demand that you leave U.S.S.R. waters immediately. Unless you do so, force of arms will be used against you.
SNP	You are violating the Regulations for navigating and remaining in U.S.S.R. waters. I demand that you cease violations.
SNR	Despite warnings, you continue to violate the Regulations for navigating and remaining in U.S.S.R. waters. You are to leave them immediately.

By day these signals will be made by flags of the *International Code of Signals*. By night they will be made in Morse Code by signal lamp.

In addition the signals may be transmitted by RT in plain language on 500 KHz, 2182 KHz and 156·8 MHz as well as by voice using a megaphone or any other amplifying device.

2. Warning signals to foreign submarines, which are submerged.

<i>Signal</i>	<i>Meaning</i>
A series of 3 explosions at 1 minute intervals, followed after an interval of 3 minutes by a second series of 3 explosions.	You are in U.S.S.R. waters. I demand that you surface immediately. Unless you comply with this order in 10 minutes, force of arms will be used against you.

An acoustic signal by sonar may be given simultaneously, with the same meaning as above. The signal will consist of 5 dashes, each dash 3 seconds long, interval between dashes 3 seconds.

BULGARIAN REGULATED AREAS

Details of regulated areas that are not indicated on the charts are given in Appendix VI.

24-26 *Replace by:*

U.S.S.R. waters.—Pilotage is compulsory for all foreign vessels at all ports open to them.

15

4 *Add: POLLUTION of the sea.* The *International Convention for the Prevention of Pollution from Ships 1973*, of which Annexes I, II and V are mandatory and III and IV are optional, is summarised in the *Mariner's Handbook*.

The Black Sea is defined as a Special Area for the purposes of the Convention. Annex I prohibits any discharge of oil or oil mixtures into the special area.

Annex II deals with Noxious Liquid Substances in bulk.

Annex V regulates the discharge of garbage from ships and contains special provisions for the Black Sea.

U.S.S.R. regulations prohibit, under severe penalties, discharge within the territorial and internal waters of the U.S.S.R. of oil, oil products and any other substance injurious to human health or to the living resources of the sea, or which may cause damage to a holiday resort, or prevent other legitimate uses of the sea by other persons. Failure to inform the nearest U.S.S.R. authority of accidental or emergency discharge of such substances within the territorial and internal waters of the U.S.S.R. and failure to note the occurrence in the ship's log, also carry severe penalties.

U.S.S.R. merchant vessels and civil aircraft are instructed to inform U.S.S.R. authorities of witnessed infringements of the U.S.S.R. regulations and of the international regulations.

Within the territorial and internal waters of the U.S.S.R. vessels suspected of infringing the regulations are liable to be stopped, boarded and inspected. If an infringement has taken place within those waters the vessel is liable to be detained.

11-12 *Replace by:*

Black Sea.—Belgorod-Dnestrovskiy, Il'ichevsk, Odessa, Kherson, Yalta, Novorossiysk, Tuapse, Sochi, Sukhumi, Poti, Batumi, Kiliya, Izmail, Reni, Yuzhnyy, Ust'-Dunaysk.

51 *Add:* Quarantine information may be sent to certain ports by ships heading for them, through appropriate coast radio stations. If sent, this information should be prepared in the format given in the International Code of Signals, should include the name of the ship, and should be addressed to the port sanitary officer not earlier than 12 hours, not later than 5 hours, before arrival.

16

7 *Add:* (i.e. Leave me on your port hand).

8 *Add:* (i.e. Leave me on your starboard hand.)

39 *Add:*

Vessels passing ships engaged in special operations in U.S.S.R. waters.—Ships, with the exception of dredgers, engaged in special operations in narrow waters (cable lying, maintaining navigational aids, surveying, etc.) will display the appropriate signals from the International Regulations for Preventing Collisions at Sea. A vessel approaching such a ship must reduce speed in good time and, at a distance of at least 5 cables, sound one prolonged blast on the siren. She must not pass the ship engaged in special operations until such ship has lowered or extinguished the special signal she is displaying.

17

44-54 *Replace by:*

SIGNALS.—**International Icebreaker Signals** are contained in the International Code of Signals.

18

1-16 (and table above 1) *Delete*

18-27 *Replace by:*

Storm signals.—Details of storm warnings broadcast by radio are given in *Admiralty List of Radio Signals*.

National or local visual storm warning signals are shown in many countries, and these signals, where known, are described in this volume. In 1978 they were discontinued in U.S.S.R. ports.

The International System of Visual Storm Warning Signals, stipulated in the International Convention for the Safety of Life at Sea, is in use in some countries, but only in Turkey as far as this volume is concerned. Details of the International System are given in *The Mariner's Handbook*.

19-20

Delete entire pages.

21

3 *Delete* "or OIY"

20 *Add:* One or two amber quick flashing lights may also be exhibited in confined or congested waters.

28 *Add:* These buoys contain a telephone under a cover at the centre of the buoy, by which communication can be established with the submarine.

32-50 *Delete*

54 *Add:*

Signals displayed when carrying out diving operations.—During diving operations the following signals will be shown from the diving ship;

By day. Flag "A" of the International Code of Signals.

At night. Two green lights, disposed vertically, and visible all round the horizon.

Where practicable these signals should be shown on the side from which the diving operation is being carried out.

56 *For* "signal "J.D." of" read "appropriate signal from"

22

2 *Add:*

U.S.S.R. towage signals.—The following signals are used by the vessel being towed:—

(a) 1 long blast: Tow straight ahead or astern (as appropriate).

(b) 2 long blasts: Stop engines.

(c) 1 long and 1 short blast: Reduce speed.

(d) 1 short and 1 long blast: Increase speed.

(e) 1 long, 1 short and 1 long blast: Let go (or take up) tow.

(f) 1 short blast: Tow to starboard.

(g) 2 short blasts: Tow to port.

(h) 3 short blasts: Go full speed astern.

(i) 3 long blasts and 1 short blast: Tug required.

(j) At least 5 short blasts: Stop immediately.

Notes: When 2 tugs are employed, one will be directed by the ship's whistle and the other by "oral" whistle signals. All signals are repeated by the tug(s).

13-55 *Replace by:*

Buoyage.—All countries in the area covered by this volume have adopted the IALA Maritime Buoyage System (Region A); details of the system are given in the publication *IALA Maritime Buoyage System* (NP 735).

Buoyage in the waters of the U.S.S.R., Romania and Bulgaria have been converted. Buoyage in Turkish waters had partly been converted in 1984: details of individual buoys are given in the body of this book and shown on the charts.

23

Whole page and diagrams entitled U.S.S.R. Buoyage System *Delete*

24

1-45 *Delete*

25

20 **Life-saving stations.**—at foot of list headed “U.S.S.R.” *add*

*Izmail

*Il’ichevsk

*Novorossiysk

28-29 *Delete* “, and” to “164”

10-23 *Replace by:*

Bulgaria
Burgas
Varna

Romania
Constanța

Turkey
Canakkale
Istanbul
Samsun
Trabzon
Zonguldak

U.S.S.R.

Batumi, Berdyansk, Feodosiya, Ismail, Kerch (Kertch in list), Kherson, Nikolayev, Novorossiysk, Poti, Reni, Sevastopol’, Sochi, Sukhumi, Taganrog, Tuapse, Yalta, and Zhdanov.

Port radio stations.—

Romania
Constanța
Constanța Pilot
Galați Pilot

Turkey
Istanbul
Yarımca Pilot Vessel
Çanakkale (and Pilots)
Dardanelles and
Bosporus Pilots
(North-bound:
Mehmetçik burnu.
South-bound:
Kavak burnu.)

U.S.S.R.
Batumi
Berdyansk
Il’ichevsk
Ismail
Kerch’
Kherson
Novorossiysk
Odessa
Poti
Reni
Sochi
Sukhumi
Tuapse
Yalta
Zhdanov

Electronic aids.—Loran “C” (skywave coverage only) is available over Marmara Denizi, the western part of the Black Sea and the Sea of Azov.

30 *Replace by:*

and fuel oil at Mangalia and Sulina.

39 *Replace by:*

Romania.—Mangalia, Sulina and Galați.

27

17 *Replace by:*

Turkey:—Full.—Istanbul

Exemption certificate only.—Izmit; Samsun; Trabzon; Songuldak.

19-23 *Replace by:*

Romania:—Constanta; Galati (exemption certificate only).

U.S.S.R.:—Full.—Batumi; Belgorod-Dnestrovskiy; Feodosiya; Il'ichevsk; Ismail; Kherson; Kiliya; Nikolayev; Novorossiysk; Odessa; Poti; Reni; Sevastopol; Tuapse; Ust'-Dunaysk; Yuzhnyy, Zhdanov.

Exemption certificate only.—Berdyansk; Kerch'; Sochi; Sukhumi; Yalta.

64

33-56 *Replace by:*

Ice Accumulation on Ships.—*See The Mariner's Handbook.*

86

13-23 *Replace by:*

Navigation rules for Dardanelles.—*See* page 12.

Speed of vessels.—*See* page 13.

Pilotage.—*See* page 12.

28 *For* "Kum burnu" *read* "Kumkale (Kum) burnu"

31, 35 *For* "Kum burnu" *read* "Kumkale burnu"

38 *After* "lighthouse" *insert* "and signal station"

87

4-10 *Replace by:*

Caution. Anchoring, fishing and landing are prohibited within the area indicated on the chart.

Landing. As Seddülbahir there is a small protected basin close north-eastward of Kale burnu, which is used by the pilots. Lights are exhibited at its entrance, and close northward and southward of a rocky patch three-quarters of a cable east-south-eastward.

20, etc. *For* "Kum burnu" *read* "Kimkale burnu"

31 *Add:* There is a signal station at the lighthouse; a racon transmits from it.

88

12 *After* "height" *insert* "and fitted with a radar reflector"

15 *Add:* There are three mooring buoys at the head of the bight.

17, etc *For* "Kum burnu" *read* "Kumkale burnu"

21 *Add:* A mooring buoy lies about $2\frac{1}{2}$ miles eastward of Kim burnu, and 4 cables offshore.

31 *For* "Dalyan" *read* "Kepez (Dalyan)"

33 *Add:* A rocky patch, with 6·1 m over it, lies between 5 and 7 cables from the shore, $3\frac{1}{2}$ miles eastward of Kumkale burnu.

37 *For* "Erenköy" *read* "Intepe (Erenköy) limanı"

42, 46, 50 *For* "Erenköy" *read* "Intepe"

47 *Add:* A mooring buoy lies off Intepe limanı, $4\frac{3}{4}$ miles south-westward of Kanlidere Burnu lighthouse.

89

8 *Add:* A light is exhibited from a white metal framework tower with a red lantern on Karanfil burnu.

17 *After* "buoy," *insert* "with a spherical topmark painted black above red."

20 *Add:* A small but conspicuous monument stand near the coast, 1·4 miles SW of Namazgâh light.

26-31 *Delete*

33 *For* "Dalyan" *read* "Kepez"

39 *Add:* a light-buoy, (W cardinal) lies 2 cables westward of the fort.

44-50 *Delete*

53-56 *Replace by:*

Charts 1608, 1659, 2429, with plan of Çanakkale Boğazi

Directions for entering The Dardanelles from south-westward.—When approaching from south-westward the coastal banks and shoals fronting the coast between Yenisehir ($39^{\circ} 59' N.$, $26^{\circ} 11' E.$) and Kumkale burnu about $1\frac{1}{2}$ miles north-eastward should be given a wide berth. It is advisable to keep in depths of 20 m (60 feet) or more as the depths decrease rapidly towards the shore.

When Intepe ($40^{\circ} 01' N.$, $26^{\circ} 20' E.$), a large village situated on the side of a hill, bears about 087° open northward of Kumkale burnu, course may be altered north-eastward: it should be noted that these marks in line do not clear the 9.1 m and 8.5 m patches lying westward of Kumkale burnu. Kumkale burnu may be passed at a distance of not less than 2 cables.

At night a vessel should keep in the *white* sector of the light on Mehmetçik burnu, bearing more than 010° , until the light on Kumkale burnu bears more than 104° .

90

29 *Add:* A signal station is situated at the S end of the fort shown on the chart, one mile north-north-eastward of Çanakkale light.

45-48 *Replace by:*

There are several mooring buoys in the bay up to 3 cables offshore; thus there is little clear space for anchoring.

Control station.—See page 10 for Quarantine and Customs regulations. In 1983 it was reported that all vessels inward bound were required to stop off Çanakkale while officials in a launch examined ship's papers and gave clearance. The recognised signal to be made by a vessel approaching Çanakkale if the launch could not be seen was reported to be 3 long blasts.

Pilotage is compulsory for vessels bound for Çanakkale. ETA should be sent 24 hours in advance (vessels with dangerous cargoes 48 hours).

Pilot embarks off Mehmetçik Burnu and in bad weather off Kepez Koyu or Gelibolu as appropriate. See page 12.

52 *Add:* There is a vehicle ferry service to Eceabat.

91

16 *Add:* A small angled mole extends 165 m north-north-westward from the point. Two dolphins are situated 75 m northward and 50 m southward, respectively, of the outer leg of the mole. A light is exhibited from each dolphin.

35 *After "height" insert "and fitted with a radar reflector"*

44-46 *Replace by:*

A light-buoy (W cardinal) is moored 3 cables...

54-55 *Replace by:*

...south-eastward of Nara lighthouse. There are several mooring buoys in the southern part of Nağra liman.

92

4, 44, 51 *For "Kilya koyu" read "Poyraz koyu"*

17 *Delete "partly ruined"*

30 *Add:* Leading lights are exhibited from white metal framework towers, about 40 feet (12^m2) in height, close westward of Eceabat, the front light at an elevation of 108 feet (32^m9) and the rear one at an elevation of 141 feet (43^m0). The lights in line bear 242° and lead through the centre of the channel in the northern part of The Narrows.

31 *For "Kilya koyu" read "Poyraz (Kilya) koyu"*

46 *For "2499" read "2429"*

53 *Add:* There is a mooring buoy in the middle of the bay.

93

1 For "2499" read "2429"

3, 6, 13 For "Kilya koyu" read "Poyraz koyu"

29 Replace by:

Between Bigalı Burnu and Akbas Burnu about $1\frac{1}{4}$ miles east-north...

34 For "the steep, bluff point" read "Akbas Burnu"

44 Replace by:

...the foot of Akbas Burnu.

94

3 Add: A light is exhibited from a white metal framework tower with a red lantern on Uzun burnu.

30 For "Abidos bankı" read "Dalyan bankı"

39, 45 For "Abidos bankı" read "Dalyan bankı"

96

8, 13 For "Cumali" read "Bağlar

14, 22 For "Galata burun" read "Kınarva (Sütlüce) burnu"

15 For "Galata" read "Sütlüce (Galata)"

20 After "situated" insert "on a small island about 90 m offshore"

97

35 Add: A fog signal is sounded from the light-structure.

A pilot station was reported in 1983 to have been established about 3 cables south-westward of the light-tower.

99

8-10 Delete "A shoal" to "light-structure."

9-10 Replace by:

...of 24 feet (7^m3) over it lies 4 cables north-north-westward of Çardak light-structure. A light-buoy (west cardinal: pillar) is moored 5 cables northward of the light-structure. Between Çardak bankı and...

27 For "46" read "47"

30 Add: In 1975 a stranded wreck lay one mile northward of Eskifiner tepe.

32-33 Replace by:

..., fitted with a radar reflector, situated $1\frac{1}{2}$ miles north-westward of Eskifiner tepe and marks the...

101

22 Replace by:

Prensens (formerly Kızıl) adaları form the third group, composed of nine...

27 Add:

Pollution of the sea. Due to the non-tidal nature of these waters, national authorities are extremely rigorous in the application of anti-pollution regulations. See page 15.

43-45 Replace by:

...eastern half of Marmara Denizi, as indicated on the charts. A good lookout should be kept for them when passing...

102

14 After "burnu." insert "A prominent black and white framework radio mast stands half a mile inland on a hill 3 miles northward of Çankaya burnu.

35 For "Koca burnu" read "Kocaburun"

103

13-15 *Replace by:*
...are several mosques and churches in the town, and a small sheltered fishing harbour, protected by two moles, abreast its centre.

32 *Delete*

37 *For* "Koca (Kodja) burnu" *read* "Kocaburun"

104

1 *Replace by:*
Chart 1004

9 *Add:* There is a small fishing harbour at Hoşkøy, protected by an angled mole.

17 *Delete*

25 *Replace by:*
Chart 1005

Kocaburun to Tekirdağ.—Coast.—From Kocaburun the coast...

38 *For* "2605" *read* "1005"

52 *Add:* In 1974 reclamation and harbour works were in progress on the construction of a new port, to be protected by two breakwaters.

105

19 *Replace by:*
Chart 1005

27 *After* "burnu" *insert* "or Kargaburun"

40 etc. *For* "Liman (Adar) burnu" *read* "Adaardi (Adar) burnu"

43 *For* "Marmaraereğlisi" *read* "Marmara Ereğlisi"

51 *For* "267^m4" *read* "27^m4"

106

Heading *For* "Deiniz" *read* "Denizi"

1 *Replace by:*
Chart 1005

3 etc. *For* "Liman (Adar) burnu" *read* "Adardi (Adar) burnu"

6 *For* "Marmaraereğlisi" *read* "Marmara Ereğlisi"

18-21 *Delete*

23 *Add:* A jetty 8 m wide extends 200 m eastward from the shore 6 cables north-westward of Adaardi burnu.

28 *Delete*

107

1 *Replace by:*
Chart 1005

12 *Add:* Breakwaters shelter the jetty from northward, southward and south-westward

21-22 *Delete* "it" to "winds"

34 *Add:* A buoy (S cardinal) marks the end of a pipeline extending about 4 cables south-south-westward from the shore 2½ miles north-westward of Baba burnu.

108

35-39 *Delete* "A" to "point"

109

24 For "Inceburun (Ince burnu)" read "Karaburun, formerly also known as Inceburun"

30, 33-34, 41, 42 For "Inceburun" read "Karaburun"

45 Delete "906,"

110

15-16 Replace by:

...some houses and several small piers. The longest and northernmost pier projects $1\frac{1}{2}$ cables southward from a position $1\frac{1}{2}$ miles west-south-westward of Kale burnu and has depths of 16 to 30 feet (4^m9 to 9^m1) alongside its seaward half. Karabiga is the port of Biga, situated about 13 miles south-...

18-19, 25 Delete

22-23 Replace by:

...eastward from a low cliffy point about 2 cables east-north-eastward of the root of the longest pier; a rock, 3 feet (0^m9) high, lies on this bank half a cable...

111

4 Replace by:

Chart 1004

29 For "906" read "1004"

46 Add: There is a small sheltered port on the southern side of Erdek. It is protected westward by a mole between the south-western extremity of the town and Zeytinliada, and is entered between the latter and a short angled mole projecting south-westward from the south-eastern end of Erdek.

48-50 Delete ", there" to "mainland"

112

1 For "906" read "1004"

9 Add: A light is exhibited, at an elevation of 180 feet (54^m9), from the north-eastern summit on Tavşan adası.

10-11 Replace by:

Cinarli Limani is contained between a breakwater which extends from the shore $2\frac{1}{2}$ cables NE of Seyitgazi Tepe, and a point about 3 cables further NE. A light is exhibited from the breakwater head. A naval base is situated in the...

31 Add: Tankers berth with both anchors out forward and sterns secured to mooring buoys. A local pilot and mooring launch are available. Daylight movements only are allowed.

49 Add: A black conical buoy with radar reflector is moored 1·8 miles south-south-eastward of Tavşan adası (Towshan) light.

113

1 Replace by:

Chart 1004

10, 29, 47 For "Avşar" read "Türkeli"

35 Add:

Submarine cable.—A submarine cable, indicated on the chart, is laid across the north-eastern part of Ekinlik geçiti.

114

1 Replace by:

Chart 1004

14 For "Hayırlıszada" read "Ekinlik Feneri"

22 *Replace by:*

Yiğitler geçiti.—Yiğitler geçiti (formerly Araplar geçiti) between Türkeli...

28 *Add:* A rock with a depth of 2 m or less over it lies 3 cables north-eastward of Büyüliman burnu.

29 *For* “Araplar” *read* “Yiğitler”

30 *For* “Avşar” *read* “Türkeli”

49 *Delete*

115

1 *Replace by:*

Chart 1004

50 *Delete* “, see view on chart 2242”

116

1 *Replace by:*

Chart 1004

9, 22 *Delete*

16, 50 *For* “Konya liman” *read* “Ocaklar liman”

17 *For* “Büyükmaymun” *read* “Maymun”

117

1 *Replace by:*

Chart 1004

10, 24, 42 *For* “Beyazburun” *read* “Beyaz burnu”

26 *After* “Marmara,” *insert* “has a small fishing harbour and”

31 *Add:* A light is exhibited from the head of the fishing harbour mole at Marmara.

A light is exhibited from a white metal framework tower, 4 m in height, on Domuz burnu, the northern extremity of the island, 5½ miles west-north-westward of Beyaz burnu.

48 *Add:* A light is exhibited from the head of a mole extending from the western side of the bay, 4 cables southward of its western entrance point.

118

1 *Replace by:*

Chart 1004

3 *For* “Beyazburun” *read* “Beyaz burnu”

30 *Add:* Marmara fishing harbour light is mentioned on page 117.

35 *For* “Kupumar)” *read* “Kukumar)”

40, 45, 54 *For* “Kızak limanı” *read* “Topağaç limanı”

119

1 *Replace by:*

Chart 1004

5 *Replace by:*

Charts 1004, 1005

19, 45 *Delete*

22 *Replace by:*

...and a position abreast Akça (formerly Fatih or Halko) adası, an islet 37 m high,...

32, 34, 46 *For* “Fatih” or “Fatih” *read* “Akça”

120

1 *Replace by:*

Charts 1004, 1005

3, 13 *For* "Fatih" *read* "Akça"

4 *Replace by:*

Between Akça limanı and Kapsül burnu, the eastern extremity of...

7, 11, 13, 22, 52 *For* "Kapsala" *read* "Kapsül"

20, 47 *Delete*

121

1, 30 *For* "907" *read* "1005"

5 *For* "Kapsala" *read* "Kapsül"

43-53 *Replace by:*

The harbour of Bandırma is formed by an eastern mole projecting about 5 cables west-north-westward from the shore abreast the northern part of the town, and a western breakwater extending about $3\frac{1}{2}$ cables eastward from the western side of the head of Bandırma limanı. There is a short angled breakwater about $1\frac{1}{4}$ cables southward of the eastern mole, and a quay and three moles extending north-eastward from the south-western side of the harbour, with a smaller mole projecting northward towards the middle of the western breakwater at the western end of the port. The quay and three large moles are served by the railway system and have charted depths alongside of 7·3 to 11 m.

A light is exhibited from a white tower at the head of each breakwater.

55 *For* "breakwater" *read* "short angled breakwater"

122

2-9 *Replace by:*

A detached 27-foot (8^m2) patch is charted $2\frac{1}{2}$ cables northward of the root of the eastern mole.

Pilotage.—A pilot is available and boards off the entrance.

16-19 *Replace by:*

Water, a tug and lighters are available.

23-25 *Replace by:*

Harbour limits.—The outer harbour is contained within a line drawn in a direction 114° from Ense Burnu ($40^\circ 24' N.$, $27^\circ 54' E.$) to the shore one mile NE of Bandırma Limanı.

35 *Replace by:*

No vessel must anchor in the approaches to the Inner Harbour, or in such a way as to hamper the movements...

45 *Add:*

Bagfas- Iskur fertiliser jetty is situated 3 miles NW of Bandırma Limanı. The jetty is 77 m (252 ft) in length and has depths of between 9 to 11 m (29 to 36 ft) alongside. The pilot for this jetty is embarked off Bandırma Limanı

48 *Replace by:*

Chart 1005

123

1 *Replace by:*

Chart 1005

23 *Add:* A light is exhibited from a structure on the eastern side of the river mouth, at Sazlı Kahve burnu.

41 *Add:*

Prohibited landing.—A penal settlement is established on the island. Approaching, anchoring near and landing on the coast of Imralı adası is therefore prohibited.

49 *Add:* A breakwater extends 110 m south-south-eastward from a position $3\frac{1}{4}$ cables west-south-westward of Değirmen burnu, thence 60 m west-south-westward. There is a pier three-quarters of a cable west-north-westward of the root of the breakwater.

51-52 For "three-quarters of a cable south-eastward" read "1½ cables east-south-eastward"

124

10 Add: In 1970, however, a vessel passing southward of the island reported no such trouble.

22, 26 Delete

27, 32, 44, 47 For "Arnavut (Arnaut) burnu" read "Arnavutköy (Arnaut) burnu"

28 For "Eşkel limanı" read "Essence (Eskel) limanı"

31 Add: A radio tower, marked by three red flashing lights, stands 1¼ miles south-south-eastward of Burunucu.

50 Add: A fog signal is sounded from the light-tower.

A light is exhibited close westward of Arnavutköy burnu.

51 Replace by:

Charts 1005, 224

125

1, 12 For "908" read "1005"

28, 34, 52 For "Arnavut burnu" read "Arnavutköy burnu"

54-55 Replace by:

...of which is the usual landing place. In 1976 there were depths of 12·7 m to 13·6 m alongside the outer side and of 4·3 m to 7·5 m alongside the inner side of the jetty head, and depths of 2·9 m to 6·0 m alongside the eastern side of the jetty. A Ro-Ro berth is situated on the eastern side of the jetty.

126

2-3 Replace by:

A mooring buoy lies close northward of the jetty head to assist berthing and hauling off.

A light is exhibited from the south-eastern end of the jetty head.

6 Replace by:

...offshore close westward and 1½ cables south-eastward of Town quay.

It is reported that the pilot boards from a boat about half a mile to seaward of the Town quay. The local signal for the pilot is two prolonged blasts on the whistle.

21 Replace by:

Chart 1005

23, 27 For "Tuz burnu (Tuzla burnu)" read "Tuzla burnu"

30-35 Replace by:

...(591^m3). A conical buoy, moored about 2 cables offshore, one mile south-westward of Tuzla burnu, marks the outer end of the pipeline to the shore.

Tuzla burnu is low and sandy, with marshes within it. A light is exhibited from a white framework tower situated on the point.

127

2-5 Replace by:

...westward of Göldere. In 1972, it was reported that there were depths of from 6·4 m to 10·4 m alongside the outer 85 m of the northern side, and from 6·1 m to 12·2 m alongside the outer 110 m of the southern side. Caution is advised when berthing alongside the inner half of the northern side, as rocks, with a depth of 3·7 m over them, lie off it.

A light is exhibited from a grey framework tower at the head of the Town jetty.

7 *Add:*

It was reported (1987) that a new jetty, capable of berthing vessels of 3000 grt, had been constructed 5 cables S of the Town jetty.

A tanker berth, consisting of a short jetty, extends from the shore 11 cables E of Tuzla Burnu. Tankers berth stern-to at the head of the jetty with anchors laid out forward. Daytime berthing only, unberthing may take place any time. Maximum size of vessel, length 178 m, draught 10 m.

A fertilizer berth is situated 6 cables E of Tuzla Burnu. The E end of the jetty has facilities for handling bulk or bagged fertilizer and the W 300 m of the jetty is for handling liquid ammonia. Minimum depth alongside 12·6 m. Berth accommodates vessels up to 32 000 grt. Vessels always berth port side to.

9 *For "Tuz burnu" read "Tuzla burnu"*16-17 *Replace by:*

...cargoes must anchor in the charted explosives anchorage between one and 1½ miles west-south-westward of Town jetty.

21 *Replace by:*

Chart 1005

52 *Delete*

128

1-2 *Replace by:*

Chart 1005

North-eastward for 12 miles to Mersin burnu and thence eastward for 7 miles to Deveboynu (Deve Boynu)...

6 *Add:* A light is exhibited from a structure on Mersin burnu.

An outfall marked by a small buoy extends one cable seaward from Pasa limanı 2½ miles west-south-westward of Deveboynu burnu.

A breakwater extends one cable east-north-eastward from a position one mile south-westward of Deveboynu burnu. A light is exhibited from the head of the breakwater.

20-30 *Replace by:*

...becomes difficult as the town is approached. A light is exhibited from the head of the pier.

Samanlı dere enters the sea 1½ miles westward of Yalova. A small harbour lies close eastward of the river mouth, with moles extending northward from its eastern and western sides.

A light is exhibited from a white concrete tower on the head of the western mole, and another is exhibited from the head of the eastern mole.

Charts 1005, 224

35 *Replace by:*

Charts 1005, 497

129

21-23 *Replace by:*

Pilotage is compulsory for all Turkish vessels of 500 grt and over and for all foreign vessels bound for, or leaving ports and anchorages in İzmit Körfezi.

Vessels entering the gulf embark a pilot ½ mile S. of Darica signal station (40° 45' N., 29° 23' E.)

Yarımca (40° 46' N., 29° 44' E.), There is a pilot station at this port.

27-52 *Delete*

130

18 *Add:* There is a jetty 300 m long with its root about 11 cables east-south-eastward of Çatal burnu: a platform from which a light is exhibited stands 2 cables off the jetty head. Mooring buoys are laid in the vicinity of the platform.

There is another jetty, also 200 m long, 6 cables farther east-south-eastward.

40 *Add:*

Measured distance.—Compass correction beacons.—Two pairs of beacons, marking a measured distance of one mile, stand $1\frac{1}{2}$ and $2\frac{1}{2}$ miles south-westward of Dil burnu. In line they bear 135° for a running course of $045^\circ/225^\circ$.

A third beacon stands $1\frac{1}{2}$ cables 180° from the seaward beacon of the south-western pair of the above mentioned beacons and another pair of beacons, in line bearing 090° , is situated 4 cables southward of Dil burnu. These alignments are used for compass correction purposes.

132

4 *For* "16 feet (4^m9)" *read* "29 feet (8^m8)"

9-16 *Replace by:*

An L-shaped wharf is situated about 4 cables WSW of the light-structure.

27 *Add:* A shipyard stands close eastward of Kaba burnu and a pier fronts a cement works and industrial complex at the south-western end of Hereke. The pier can accommodate vessels up to 10 000 tons.

32-35 *Replace by:*

...of Hereke, and has a small port for exporting phosphate rock and beet molasses. The molasses jetty extends 160 feet (48^m8) east-south-eastward and is situated the same distance northward of the phosphate pier. The latter is right-angled, projecting three-quarters of a cable eastward, and thence three-quarters of a cable southward. Vessels anchor off the head of the molasses jetty, securing stern-to. There are depths of 21 feet (6^m4) to 30 feet (9^m1) off the jetty head, but vessels can load to a draught of 35 feet (11^m0) if secured with their sterns at least 35 feet (10^m7) clear.

There is a pilot station in the port area.

48-56 *Replace by:*

A white water tower, marked by a red fixed obstruction light, stands one mile northward of Zeytin burnu.

Tütünciftlik industrial complex and oil refinery extends along the coast for about 2 miles north-westward from Zeytin burnu. There are facilities for discharging crude oil from vessels of up to 300 000 tons and for handling petroleum products, liquid chemicals, bulk and general cargoes.

The north-western end of the complex is fronted by a quay extending south-westward from the coast, with a T-headed pier, flanked by two dolphins, projecting westward from its south-eastern corner. There are depths of 11 m to 12 m at the head of the pier, which can accommodate vessels of up to 30 000 tons and is used for liquid chemical products. An angled pier for loading bulk urea is situated 4 cables south-eastward.

An angled pier for handling crude oil, liquid petroleum gas and other petroleum products extends from the shore 1 mile west-north-westward of Zeytin burnu. Vessels berth heading east-south-east on either side of the outer leg of the pier. It is reported that very large vessels, with draughts up to 18 m, can be accommodated alongside.

A berthing platform, flanked by four dolphins on each side, for vessels of up to 250 000 tons discharging crude oil, lies 12 cables westward of Zeytin burnu. The outer dolphins are marked by *fixed white* lights and a fog signal is sounded from the western dolphin. An underwater pipeline connects the platform with the refinery close inland.

A jetty extends westward from Kiler burnu, at the south-eastern end of the refinery and provides six berths for tankers up to 70 000 tons. Several prominent chimneys and a tank farm stand close north-eastward of Kiler burnu. A flare is occasionally exhibited from one of the chimneys.

A mooring buoy, exhibiting a *white flashing* light *every fifteen* seconds, lies 2 miles west-north-westward of Zeytin burnu.

Four tugs are available.

Bunkers and fresh water are available at pier berths and by lighter.

Anchorage for vessels awaiting a berth at Tütünciftlik, in soft mud with fair holding ground, is reported to be available to the northward of the main shipping track, about 3 miles west-north-westward of Zeytin burnu.

133

2-3 *Delete*

5 *For* "356°" *read* "027°"

37 *Delete* "No. 3"

134

10-11 *Replace by:*

Numerous cable and mooring buoys lie in the charted restricted area extending one mile eastward of Gölcük burnu, access to which is subject to the Port Commander's authorisation. *See* caution on chart.

21-33 *Replace by:*

Derince. The port of Derince (40° 45' N, 29° 50' E) is the largest general purpose port in İzmit Körfezi. Notice of ETA is required 24 hours before arrival.

Anchorage is forbidden near the port. The waiting anchorage is off İzmit, 4 miles E.

Pilotage is available 24 hours a day. Port pilot embarks 5 cables off the harbour entrance. Tugs are compulsory for vessels over 500 grt.

Harbour. The original harbour lies close W and within Derince Burnu and is protected by a mole that extends WSW from this point.

The new harbour, which is partly constructed on reclaimed land, lies about 5 cables NE of Derince Burnu with berths on the NW shore of the bay. A further extension to the port is being formed (1987) on reclaimed land which extends 500 m SSW from the N shore of the bay, from a position 7 cables NE of Derince Burnu.

The largest berth is 220 m in length, with a depth of 12 m alongside. There are three Ro-Ro berths the largest of which is 117 m in length and with a depth of 8 m alongside.

A container terminal is due to come into operation by 1991.

Most deck and engine repairs can be carried out.

Fuel is supplied by truck.

Fresh water, provisions and medical facilities are available.

36 *Add:* A large oil depot stands close inland; there are another two T-headed oil piers about 3 cables north-eastward of the point.

135

17 *For* "450 feet (137^m2)" *read* "496 feet (151^m2)"

18 *For* "21 feet" *read* "25½ feet (7^m8)"

23 *After* "end" *insert*, "but in 1970, they were in ruins and not in use"

A large paper mill stands close westward of the town and is fronted by a short jetty extending southward; it has a working length of 76 m, with depths of from 7.3 m to 9.8 m alongside. The jetty is connected to the mill by a narrow gauge rail bridge, and is equipped with two small fixed cranes.

24-25 *Replace by:*

There are two 3-ton cranes at the root of the main railway pier.

29 *After* "are" *insert* "two tugs and"

137

29 *For* "Kızıl adalar" *read* "Prenses adaları"

21 *Replace by:*
Chart 1005

51 *Add:* A light is exhibited from the head of a breakwater which extends about 2 cables east-south-eastward from Mimarsinam.

1 *Replace by:*
Chart 1005

6 *Replace by:*
Charts 1005, 2286

12 *Add:* A pipeline extends 6 cables south-eastward from the shore 8 cables westward of Anbarlı: its end is marked by a light.

31 *Add:* A white mooring buoy lies close offshore 3 cables west-north-westward of the railway station.

34-40 *Replace by:*

Oil berths.—A submarine pipeline extends 3 cables south-south-eastward to an offshore oil buoy berth, close to the mouth of Harami dere, 11 cables westward of Anbarlı village.

A platform oil berth is situated 500 m eastward of the buoy berth.

Vessels secure at both berths with two anchors out forward and sterns secured to mooring buoys aft. Pilotage is not compulsory but is recommended; the pilot embarks off Anbarlı. One tug from Istanbul normally assists during mooring operations. Daylight berthing is only allowed, but unberthing at night is permitted.

Lights are exhibited from the oil platform.

Submarine exercise area.—Submarines frequently exercise in an area, indicated on the chart, centred about 10 miles southward of Değirmen burnu. *See* pages 21 and 101.

2 *For* "westernmost" *read* "southernmost"

5 *Delete* "See view on chart 2286."

25-27 *Replace by:*

Kumkapi (Kam Kapu) fishing harbour lies 7 cables westward of Ahırkapi burnu. It is protected southward by a mole projecting south-eastward and eastward. A light is exhibited at the molehead. In 1985 quay works were in progress 4 cables E of the head of the mole.

30-34 *Replace by:*

...southward of Ahırkapi burnu. A depth of 33 feet (10^m1) exists near the southern edge of the bank, 6 cables southward of the point.

A light-buoy, (E cardinal) is...

41-56 *Replace by:*

At night the *white* sector of Kızkulesı light (page 148), bearing between 000° and 030°, leads clear between Ahırkapi and Fenerbahçe bankı (page 147).

Anchorage.—Anchorages for vessels in quarantine, vessels carrying dangerous cargoes, and passenger and dry cargo vessels lie between Yeşilköy and Ahırkapi: their limits are shown on the charts.

3 *After* "submarine" *insert* "pipelines and"

5 *Delete* "See note on chart 1198."

6 *Delete*

7 *After* "bay:" *insert* "2286,"

38 *Add:* Several mooring buoys lie off Tuzla village.

142

37 *Replace by:*

Chart 2286

42 *Replace by:*

...causeway on a rocky flat. The clump of trees sur-...

50 and 45 *Reverse line numbering*

52 *Replace by:*

...south-eastern side is a small basin with a shallow lagoon close southward. In 1971, a jetty was under construction extending north-eastward from the northern end of Ekrembey adası, and harbour works were in progress.

56 *Replace by:*

Pendik Dockyard is situated close NW of Aydınli Burnu. The dockyard is protected by a breakwater which extends W and NW from this headland and by Aydınbey Yadi, formerly an island, which is connected to the mainland by a causeway.

Lights are exhibited from the head of the breakwater (concrete tower) and the S point of Aydınbey Yadi (framework structure).

143

1 *Replace by:*

Chart 2286

2-3 *Delete*

18 *Add:* A white mooring buoy lies 2 cables offshore.

21 *Delete*

42 *Add:* A wreck, with a depth of 2 m over it, lies close westward of the light.

55 *Add:* A line of buoys extends westward and north-westward for about 2½ cables from close off Laz burnu, situated 5 cables east-south-eastward of Fenerbahçe burnu. Navigation inshore of these buoys is prohibited and speed in their vicinity is restricted.

144

Heading *Replace by:*

PRENSES ADALARI

48-49 *Replace by:*

PRENSES ADALARI.—Dangers.—Navigational aids.— Prenses Adaları, formerly known as Kızıl adalar or Princes islands, is a group of nine islands lying about 2 to 3 miles...

145

Heading *Replace by:*

PRENSES ADALARI

22-23 *Replace by:*

A light-buoy (N cardinal) is moored at the N...

34 *Add:* A light is exhibited, at an elevation of 102 feet (31^m1), from a white metal framework tower, 19 feet (5^m8) in height, situated near the southern extremity of Balıkçı adası.

56 *Delete*

146

Heading *Replace by:*

PRENSES ADALARI

2-3 *Delete*

24 *Delete* "situated on some offshore rocks"

- 26, 31, 35 For "Kasik" read "Pide"
 32-35 Delete "This" to "channel."
 48 For "150 feet (45^m7)" read "210 feet (64 m)"

147

- 2 For "313 feet (95^m4)" read "272 feet (82^m9)"
 7-8 Delete "with" to "it"

15 Replace by:

...Prenses adalari and the Asiatic mainland.

48-55 Replace by:

The white sector of Kizkulesi Light, bearing between 000° and 030°, clears Fenerbahçe banki.

A light-buoy (W. cardinal) is moored on the W side of Fenerbahçe banki, 8½ cables W of Fenerbahçe Burnu light-structure.

Prohibited Area.—Degaussing range.—An area, indicated on the chart, in which anchoring, fishing, diving, sweeping and trawling are prohibited, extends 2 miles westward from Fenerbahçe burnu. Within this area there is a degaussing range, marked by three pairs of white spherical buoys, with a mooring buoy close NE of the northernmost one, lying about 3 cables W of Fenerbahçe burnu. See page 13.

148

2-6 Delete

22 Add: It is surmounted by a prominent tower on a square base, known as Leander tower.

24-25 Delete "A" to "Kizkulesi"

37-56 Replace by:

Anchorage.—An anchorage for Turkish Naval vessels lies between Moda burnu and İnci burnu.

149

9 Replace by:

...southern end of the inner detached breakwater and a breakwater extending 2 cables west-north-westward from İnci burnu...

12 For "2½" read "1½"

13 For "1½" read "2"

14 For "2½" read "2"

15-16 Delete

20-24 Replace by:

...extends about 500 m north-westward from the Ferry Vessel pier. Farther north-westward there are two piers with berths on each side. The quays are connected with the railway system,...

31-32 Delete " , at" to "height,"

42-44 Replace by:

A light is exhibited from the head of the southernmost breakwater.

45 For "a breakwater" read "an angled mole"

50 Replace by:

...north-north-eastward of the angled mole. A ferry harbour is situated between the two moles, with a pilot station at its head. See Appendix III.

150

10 Add: A foul patch lies 1½ cables north-westward of Saray burnu.

47 Replace by:

Pilotage.—See pages 12 and 153.

151

18 For "white round" read "round stone"

21-24 Replace by:

Dolmabahçe palace is about 2 cables wide and stands on the shore $1\frac{1}{4}$ miles north-north-eastward of Saray burnu; it was formerly one of the residences of the Sultans. A prominent white building, clock tower, large and small mosque, line the shore of the strait between Dolmabahçe palace and Findikli, half a mile south-westward.

An anchorage for passenger ships lies off the north-western shore abreast Dolmabahçe palace. There are several mooring buoys in the anchorage.

152

7-8 For "Kızıl adalar" read "Prenses adaları"

27-32 Replace by:

...should be given, vessels should shape course to pass outside Ahirkapi banki. See remarks...

42-43 Replace by:

Navigation in Bosphorus.—See page 12.

There are Navigation Control stations at Kizkulesi (page 148) and Kandilli burnu (page 156). Their function is to regulate traffic in the strait, to communicate with pilot vessels guiding ships and to provide information about traffic and weather conditions to ships which ask for it. They maintain a constant watch on channel 16.

153

8 Replace by:

(i) Pilotage services for vessels berthing in the N part of Inner, Central and Outer port is provided by Tophane Pilot station at Karakoy Wharf ($41^{\circ} 01' \cdot 5$ N., $28^{\circ} 58' \cdot 9$ E.).

15 Replace by:

(a) In the designated anchorages between Yeşilköy burnu and Ahirkapi burnu: See page 140.

19 Delete "and" to "1198"

27-41 Delete

154

4-8 Delete

10 Replace by:

...(page 159), Bebek koyu (page 156), Kuruçeşme banki (page 156), south-westward of Akinti burnu (page 156) and north-eastward of Kandilli burnu. These berths are shown on chart 1198.

17-18 Replace by:

Galata (also known as Karaköy) Bridge and Atatürk Bridge contain moveable sections, which form openings 68 m and 72 m wide, respectively.

The exact time that the bridges are open varies with the time of year, but is in the early morning for a period of 1 hour. Passage through the bridges is controlled by light signals exhibited from the bridges.

24-25 Replace by:

...Selvi burnu (page 160) to the opposite shore of the strait. See Caution on Chart 1198. This caution does not...

28 Replace by:

...marked by beacons, painted white with inverted black anchors...

41 Add: A red and yellow buoy is laid near its landing place in Kanlıca koyu.

155

32-34 *Replace by:*

A large number of small vessels fish in the fairway of the Bosphorus and at night these and numerous other small craft move about unlit. An additional hazard is the random use of searchlights by the trans-Bosphorus ferries trying to avoid them. Otherwise there are but few dangers in the strait, and passage through it during daylight presents few difficulties, but no stranger should attempt to navigate it by night. Vessels over 80 000 tons are recommended to order a bow tug for the passage. *See* pages 12, 152 and 162.

156

11 *Add:* A light is exhibited at Cengelköy, 8 cables north-north-eastward of Beylebeyi Palace.

20 *Add:* Istanbul Boğazi Bridge spans Istanbul Boğazi between Ortaköy (41° 03' N., 29° 02' E.) on the European shore and Beylerbeyi on the Asiatic shore. This suspension bridge has a vertical clearance of 58 m at each end and 64 m over a central width of 400 m. Lights are exhibited to indicate the centre and limits of the central width.

39-41 *Delete*

157

7 *Replace by:*

...and a fort stands close northward of the point; Anadoluhisari...

10 *For* "56 feet (17 ml)" *read* "16 feet (5 m)"

18 *Replace by:*

...light-buoy (W cardinal), moored in a...

23 *Add:* Fatih Sultan Mehmet Bridge spans Istanbul Boğazi between Rumeilihisari (41° 05'·5 N., 29° 03'·5 E.) on the European shore and a point close S of Kanlica Koyu on the Asiatic shore. This suspension bridge has a vertical clearance of 64 m over a central width of 400 m.

34 *Add:* A light is exhibited from Balta limani 8½ cables northward of Aşıyan burnu.

53 *Add:* A light is exhibited, at an elevation of 44 feet (13^m4), from a white metal framework tower, 41 feet (12^m5) in height, on the northern entrance point of İstinye koyu.

158

9-11 *Replace by:*

1. A light stands close off the E extremity of Yeniköy Banki.

17 *Add:* The north-western part of the anchorage is reserved for Naval vessels. There are several mooring buoys in the anchorage.

24 *Add:* Paşabahçe light is exhibited from a white metal framework tower close westward of the oil depot.

44 *Add:* A light is exhibited from a framework tower, 10 m in height, on Selvi burnu.

46-47 *Replace by:*

There is an oil fuel depot at Selvi burnu (41° 08' N., 29° 04' E.). Vessels of a draught...

49 *Add:* A small breakwater, exhibiting a light at its head, encloses four jetties 3 cables northward of Selvi burnu.

53-56 *Delete* "The best" to "Selvi burnu."

159

14 *Delete* "see" to "1198"

37-40 *Replace by:*

A bank with depths of less than 18 feet (5m5) on it extends about half a cable off the northern shore of...

46-48 *Delete* "The" to "cables."

50 *Delete*

55-56 *Replace by:*

Storm signals.—Light.—Storm signals (page 18) are displayed at the Storm Signal station about 6 cables west-south-westward of Mesar burnu.

A light is exhibited, at an elevation of 39 feet (11^m9), from a white mast, 19 feet (5^m8) in height, at the Storm Signal station.

160

15-27 *Replace by:*

A light-buoy (S cardinal) is moored on the SW side of Selvi bank, 4 cables NW of Selvi Burnu

A light-buoy (W cardinal) is moored off the SW end of the N Umur bank.

A light buoy (N cardinal) is moored 3½ cables SW of Acar Burnu.

35-37 *Delete*

161

20 *Delete* "and" to "1198"

25 *Add: Overhead power cable.*—An overhead power cable is suspended between pylons, each 124 m in height and marked by lights, situated 6½ cables southward and 8 cables westward of Kavak burnu. The cable has a minimum clearance of 70 m.

33 *For* "3 and 9 cables south-south-westward" *read* "3 and 5 cables southward"

34 *Add:* A light is exhibited from a structure on Fil burnu.

38 *Add:* A breakwater extends 2 cables south-westward from Poyraz burnu.

51 *Replace by:*

...signal is sounded from an observation tower about three quarters of...

162

27-29 *Delete* "A group" to "strait."

33 *Add:* A breakwater extends 2¼ cables southward from Rokettaşı enclosing two small basins: another breakwater extends half a cable eastward from Paşa burnu. A light is exhibited from each breakwater head.

34 *For* "castle" *read* "fort"

36 *Delete* "Burnu"

37 *For* "circular" *read* "hexagonal"

39 *Replace by:*

...sounded and a racon transmits from the lighthouse and a radio beacon transmits...

12-14 *Delete*

29, 37, 44 *For* "Kilyos" *read* "Kumköy"

30-32 *Replace by:*

...are good marks even during fogs, as the latter seldom completely obscure the base of the mountains.

163

12-14 *Delete*

29, 37, 44 *For* "Kilyos" *read* "Kumköy"

30-32 *Replace by:*

...are good marks even during fogs, as the latter seldom completely obscure the base of the mountains.

164

6-12 *Delete*

24-26 *Delete*

27 *Replace by:*

A fog signal is sounded from an observation tower $2\frac{1}{2}$ cables south-eastward of the extremity of Yom burnu.

28 *Add:*

Prohibited landing.—Landing is prohibited on the coast between the northern entrance to the Bosphorus and the meridian of $29^{\circ} 34' 34'' \cdot 2$ E on the western side of Şile limanı. For Prohibited landing southward of the northern entrance to the Bosphorus see page 154.

165

6 *For "Kelagra" read "Isıklı (Kelagra)"*

11-12 *Delete*

50 *Delete " , plan of Sile liman"*

166

1 *Delete " , plan of Sile liman"*

2-5 *Replace by:*

A mole extends $1\frac{1}{2}$ cables north-westward close south-westward of the inner islets, and then south-westward for about $3\frac{1}{2}$ cables, forming a harbour for small vessels. In 1969, a mole was under construction on the southern side of the Şile limanı. In 1987 continuous shoaling was reported in the harbour.

10 *Add:* A light is exhibited, at an elevation of 23 feet (7^m0), from the head of Şile limanı mole.

32, 35 *For "Uzunye" read "Güvem"*

49, 51, 53 *For "Kilyos" read "Kumköy"*

167

8, 9, 10, 15, 30, 53, 55 *For "Kilyos" read "Kumköy"*

25 *add:*

Prohibited landing.—Landing is prohibited on the coast from Karaburun eastward to the north entrance of the Bosphorus, except between the meridians of $29^{\circ} 01' \cdot 0$ E and $29^{\circ} 05' \cdot 5$ E. For Prohibited landing southward of the northern entrance to the Bosphorus see page 154.

170

9-14 *Replace by:*

Charts 2230, 2231

Areas periodically dangerous to navigation. Bulgarian area Nos. 41 to 45 lie in the approaches to Burgaski Zaliv and Varna Bay and extend up to 60 miles to seaward. See Appendix VI.

The NW limits of Soviet areas Nos. 708 and 709 lie 40 to 50 miles to seaward of the delta of the River Danube. See page 14 and Appendix V.

Traffic Separation Schemes.—Recommended Routes.—For traffic separation schemes see pages 174 and 183. The recommended route between Constanța and Gura Sulina is shown on the charts.

Caution.—Due to siltation, less water than charted may be found in the approaches to the River Danube estuary.

Pollution of the sea.—Due to the non-tidal nature of these waters, national authorities are extremely rigorous in the application of anti-pollution regulations.
See page 15.

42 For “Malatra” read “Esen”

171

4, 7 For “Malatra” read “Esen”

13 Add: A light is exhibited, at an elevation of 105 feet (32^m0), from a white metal framework tower, 32 feet (9^m8) in height, at Kiyiköy.

13, 14, 17, 20 For “Midye” read “Kiyiköy”

18 Add:

This harbour is sheltered by a breakwater.

51 Replace by:

...situated 6 cables north-westward of İğneada burnu. An angled mole stands on this reef, and extends 2½ cables west-north-westward from its extremity, protecting İğneada limanı from southward. A short mole forms the north-western side of this small harbour.

A light is exhibited from the head of each mole.

There is a cliff...

172

33 Add: Beacons stand on the shore 3 miles and 5½ miles south-south-eastward of Nos Sinemoretz.

173

6 Add: A light is exhibited from a structure one mile north-westward of the breakwater head.

8 Add:

Prohibited area.—A large area north-eastward of Michurin cove, shown on the chart, is periodically prohibited to navigation.

53-54 Delete “A” to “lighthouse”

174

5 Add:

Prohibited anchorages.—Anchoring and fishing in the area indicated on the chart within about 2 miles of Nos Korakya is prohibited.

Anchoring and fishing are prohibited in an area centred about 3 miles north-westward of Nos Korakya: the area is marked by a light-and-whistle-buoy (pillar; special).

39-42 Replace by:

Traffic Separation.—There are traffic separation schemes, which are not IMO adopted, for the approaches to Burgaski zaliv and for the passage northward to Varna Bay (page 181). A light-and-whistle-buoy (pillar; special) is moored at the centre of a roundabout in the entrance to Burgaski zaliv and light-buoys (pillar; safe water) are moored in the separation zone 3¼ and 2½ miles westward of the light-and-whistle-buoy. A recommended route for small vessels lies inshore of the southbound lane between Nos Emine and Nos Galata (page 182).

46-48 Replace by:

...Kolokita (Kolakythes), about 2 miles farther north-north-eastward. Some above...

50 Add: A wreck, marked by a light-buoy (pillar; isolated danger), lies 2½ miles eastward of Nos Kolokita.

175

7 *Add:* Sozopol beacon stands about half a mile west-south-westward of Nos Kharmanite at an elevation of 69 m. It consists of a metal framework tower, 15 m in height, with a daymark painted black and white in bands.

23 *Add:* Anchoring, fishing and underwater operations are prohibited within the area surrounding Sveti Ivan.

26 *Add:* Lights are exhibited from the entrance points to the harbour.

29-30 *Replace by:*

...exhibited from a square stone tower with a framework superstructure, 26 feet (7^m9) in height, painted yellow with a black band, situated...

176

6-7 *Replace by:*

...there stands a beacon 26 feet (8 m) in height, at an elevation of 281 feet (116 m).

13 *Delete* "upon" to "house"

18 *After* "eastward." *insert:* A white clubhouse on Nos Chukalya is conspicuous and a short breakwater extends west-north-westward from the point: a light is exhibited from a tower with red and white bands at the breakwater head.

30 *Add:* A submarine pipeline and cable are laid between Nos Buffos and Ostrov Bolshevik. Anchoring and fishing are prohibited in the area indicated on the chart.

A light-buoy (pillar; special) is moored close westward of Ostrov Bolshevik.

33-37 *Replace by:*

Druzba oil terminal is situated 3½ cables south-south-westward of Nos Chukalya. Two tanker berths with a maximum depth of 40 feet (12^m1) alongside can accommodate vessels 820 feet (250 m) in length: a product berth southward of the tanker berths can accommodate a vessel drawing 23 feet (7 m). A breakwater extends about 1000 feet (305 m) westward from a position close northward of the berths: a light is exhibited from the breakwater head. There is a tank farm south-eastward of the berths.

The terminal is approached by a channel, marked by light-buoys, which leads southward from the tanker anchorage (page 180).

48-52 *Delete* "A red" to "approximate."

177

23 *Replace by:*

...isthmus. This peninsula is fringed...

26 *For* "258°" *read* "285°"

48 *Add:* The recommended route to this anchorage is 007° from the traffic separation roundabout centred 9½ miles eastward of Burgas Harbour entrance.

178

27 *Delete* "white"

28 *After* "tower" *insert* ", painted black with a yellow band,"

34-37 *Replace by:*

A light-and-whistle-buoy (pillar; E cardinal) is moored on Stavro rock.

46-48 *Delete*

179

37 *After* "head." *insert:* Zapad (West) port is situated 1½ miles westward of Nos Foros. Lights are exhibited from round metal towers at the entrance points, that on the northern side having a green band and that on the southern side a red band.

49 *For* "19" and "5^m8" *read* "8" and "2^m4"

180

4-12 *Replace by:*

A light-and-bell-buoy (pillar; S cardinal) is moored off the south-eastern extremity of Burgas shoals $1\frac{1}{4}$ miles eastward of the eastern mole light.

Anchorage.—Four anchorage areas, the limits of which are shown on the chart, lie between 5 cables and 3 miles SE of Burgas harbour entrance.

15 *Add:*

Dredged channels.—A channel dredged to 39 feet (11^m9) (1981) is entered at the north-western corner of the western anchorage area and leads north-westward to the entrance to Burgas harbour. It is marked by Nos. 1 and 3 light-buoys (starboard hand) on its north-eastern side and by Nos. 2 and 4 light-buoys (port hand) on its south-western side.

Another channel, also dredged to 29 feet (11^m9) (1981), leads west-north-westward from a position $5\frac{3}{4}$ cables southward of Burgas harbour entrance to a new harbour under development in 1979. The channel is marked by light-buoys (starboard and port hand).

19 *After "The" insert "wide"*

31-44 *Replace by:*

The inner side of the eastern part of the southern mole provides fuelling berths for tankers throughout its length. There are depths of 42 feet (12^m8) at the outer fuelling berths, of 24 feet (7^m3) at North-East, North and North-West quays and of 28 feet (8^m5) alongside the eastern mole southward of North-East quay.

53-56 *Delete*

181

2 *Add*...entering harbour. Requests for a pilot should be made at least 8 hours before arrival. Pilots normally board at the anchorage (page 180). In exceptional cases pilots can be embarked before entering the traffic separation roundabouts 10 miles or 26 miles eastward of Burgas or 4 miles south-eastward of Nos Emine (page 177).

52 *Add:*

A prohibited area, radius 5 cables, lies 8 miles ENE of Nos Sveti Alanas; a red buoy marks the centre of the area.

182

3 *Add:* A beacon stands at an elevation of 114 m on Cherniyat Nos; it consists of a metal framework tower, 15 m in height, with daymark painted black and white in bands.

5 *Add:* An area, within which anchoring and fishing are prohibited, extends $2\frac{1}{4}$ miles eastward from the shore $2\frac{1}{4}$ miles northward of Cherniyat Nos.

15 *For "20 feet (6^m1)" read "59 feet (18 m)"*

22 *Add:* A prohibited area, radius one cable, lies one mile offshore $5\frac{1}{2}$ miles north-north-eastward of Reka Kamchiya light: a light-buoy (special) is moored at the centre of the area.

Two **anchorages** for merchant ships, and a quarantine and dangerous cargoes anchorage, whose positions can be seen on the chart are situated between the traffic separation scheme (page 174) and the coast southward of Nos Galata. These anchorages are for use between 1st May and 1st October. Note prohibited anchorage mentioned above which lies within this anchorage.

24 *For "30 feet (9^m1)" read "46 feet (14 m)"*

30-32 *Replace by:*

Traffic Separation Schemes.—See pages 174 and 183.

6-7 *Replace by:*

Chart 2230

Traffic Separation.—There is a traffic separation scheme for the approaches to Varna bay from southward (*see* page 174) and from north-eastward (*see* page 185), which is not IMO adopted. A traffic roundabout in the entrance to Varna bay, marked at its centre by a light-and-whistle-buoy (pillar; special), forms the junction between the two legs of the scheme. Details can be seen on the chart.

Chart 2285, plan of Varna

15-16 *Replace by:*

...with sand. They can be avoided by passing northward of a light-and-bell-buoy (pillar; port hand) which lies close northward of a dangerous wreck, situated...

18-19 *Replace by:*

...of Varna harbour.

The channel to Varna harbour is marked by light-buoys (pillar; starboard and port hand), and has a depth of 11·9 m.

20-36 *Replace by:*

A light is exhibited from a wave recorder situated about one mile west-south-westward of Evksinograd breakwater.

Anchorage.—Prohibited anchorage.—From October to April, Varna bay affords anchorage with good holding ground, in depths of about 54 feet (16^m5), mud and sand, in the area shown on the chart, centred about 2¼ miles east-north-eastward of the eastern breakwater head. The anchorage is sheltered from all but easterly winds, which, it is said, seldom blow home.

Anchorage and fishing is prohibited within a distance of 1 mile E of the E breakwater and close W of the harbour entrance.

There is a prohibited area marked by light-buoys (pillar; N and S cardinal) nearly 2 miles east-north-eastward of the breakwater head.

Spoil ground.—A disused spoil ground lies close offshore between one and 1½ miles north-eastward of the same point.

38 *After “eastern” insert “, which is quayed on its inner side,”*

44-47 *Replace by:*

...in the north-western corner of the harbour. Another wide quay projects 1½ cables southward between it and the eastern breakwater, and is used as a passenger terminal. There is a basin 1¼ cables in extent on the western side of the harbour, surrounded by a shipyard. The quays and wharves are connected to the railway system.

50-54 *Replace by:*

| There are depths of 30 to 55 feet (9^m1 to 10^m7) at most berths.

21-24 *Replace by:*

In 1973, a new deepwater ship canal has been completed connecting Varna to Varna Zapad (West Varna), a new port about 12 miles westward, which was nearing completion in 1978. It provides berthage for 11 vessels up to 25 000 tons, drawing 10 m, and is equipped for the mechanised handling of ore and bulk cargoes.

Pilotage—Pilots meet incoming ships before they enter the traffic separation roundabout eastward of the harbour entrance. In exceptional cases pilots can be embarked off Nos Kaliakra (page 185).

26 *For “1967, of 180 062” read “1978, of about 240 000”*

39 *For “5-ton” read “20-ton”*

41 *Replace by:*

Several large tugs are available.

185

30 *Add:*

Restricted area.—An area bounded by the north-western limit of the traffic separation scheme and the shore between Nos Georgi and Nos Kaliakra is closed to all foreign shipping, except for those visiting Baljik. *See page 186*

Traffic Separation.—A traffic separation scheme, which is not IMO adopted, connects the traffic separation scheme roundabout in Varna bay with a roundabout south-east of Nos Kaliakra, described on page 187.

186

10 *Add: See page 199*—Fishing area eastward.

15 *Delete* “spherical”

16 *Replace by:*

...whistle-buoy (pillar; E cardinal)...

25–26 *Replace by:*

...bay is a large holiday resort.

32–52 *Replace by:*

Baljik bay, at the head of which is the port of the same name, is entered W of Nos Baljik, situated 12 miles W of Nos Kaliakra.

The port of Baljik, which is mainly used for the handling of bulk grain and is administered by the port of Varna authorities, has one pier which can accommodate a vessel of 5 000 dwt with a draught of 7·3 m.

A light (framework tower, 8 m in height) stands at the head of the pier and another light is exhibited from a position on the hillside 5 cables NE of the pier.

Pilotage is compulsory. The pilot embarks in the outer roadstead of the port of Varna.

The approach route from Varna to Baljik is shown on the chart. Anchorage off the port of Baljik is not permitted.

53 *Add:*

Directions.—Prohibited anchorage.—The recommended route through the restricted area off this part of the coast from the north-eastern side of the traffic separation roundabout in Varna bay (page 183) is 048° for 3·3 miles, thence 020° to Baljik Harbour entrance.

Anchoring and fishing are prohibited in an area, half a mile in extent, centred about 3 miles southward of the pier at Baljik and marked by a light-and-whistle buoy (pillar; special).

187

5–7 *Replace by:*

A metal framework beacon, painted black and white in bands, stands close inland 3½ miles westward of Kavarna Bay pier.

A light is exhibited from the root of the same pier.

16 *Add:*

Directions.—The recommended route through the restricted area off this coast between Kavarna bay and Balchik bay is 180° for 1·9 miles from Kavarna light, thence 270° for 9 miles to join the 020° line approaching Balchik harbour (*see page 186*). The port of Kavarna is not open to foreign vessels.

Submarine cable.—A submarine cable is laid across the north-western part of the Black Sea from a position about 2½ miles north-westward of Nos Kaliakra to the mouth of Reka Kacha (page 270).

17 *Add: 2282*

20 *Add:*

Prohibited areas.—An area in which anchoring and fishing are prohibited is situated north-eastward of Nos Kaliakra and an area in which navigation is

periodically prohibited is situated eastward of Nos Shabla: the limits of these areas can be seen from the chart.

39 *Add:*

Traffic Separation.—From the traffic separation scheme roundabout south-eastward of Nos Kaliakra, two traffic separation schemes extend, respectively, six miles north-eastward and six miles eastward.

45 *Add:* A light is exhibited at Kartolia, six miles northward of Nos Shabla.

188

9 *Replace by:*

Chart 2282, plan of Port Mangalia

17-39 *Replace by:*

Harbour.—The harbour is enclosed by the north-eastern and south-eastern breakwaters: the former extends south-eastward for 8 cables from a point on the shore abreast the town, and the latter extends north-eastward from the shore about 1 mile southward.

Northern basin, which is the old port, lies in the northern corner of the harbour and is enclosed by a mole extending eastward from the shore.

Southern basin, comprising the main area of the harbour, is the commercial port: there are depths of 30 feet (9 m) in the eastern part and less than 16 feet (5 m) in the western part.

Navigational aids.—Dangers.—Mangalia Light is exhibited from a white stone tower situated about 1 mile west-north-westward from the port. The approach to the harbour entrance is marked by a light-buoy (starboard hand) moored 4 cables south-eastward of the north-eastern breakwater head. Lights are exhibited from the heads of the main breakwaters and from the heads of the inner moles. A light-buoy (port hand) is moored 1 cable southward for a distance of 8 cables from the head of the south-eastern breakwater. A rock with a depth of 0.4 m over it lies 2 cables southward of the breakwater head.

Pilotage.—Requests for pilotage, which is compulsory, should be made at least 2 hours before arrival off the port.

Anchorage.—The anchorage for merchant vessels lies about 1½ miles north-eastward of the harbour entrance, in depths of 17 m to 22 m.

Wharves.—Four wharves, with depths of 9 m alongside, are situated on the western side of the south-eastern breakwater.

Facilities.—The berths are served by 5-ton cranes. Water is available at the berths. Fuel oil can be supplied by lighter. Fresh provisions are available. Hull and machinery repairs can be undertaken.

44-56 *Delete*

189

1 *Replace by:*

2282

9 *Add:* A prominent T/V mast stands on the coast about 4 miles northward of the cape.

11 *After "A" insert "horn"*

18 *After "depression" insert ", the above-mentioned T/V mast"*

22 *Add:* A dangerous wreck lies 7½ miles east-north-eastward of Capul Tuzla.

29 *Add:*

Recommended Route. The recommended route between Mangalia and Constanta lead N for 13 miles from position 43° 48' N, 28° 51' E to the S entrance of a Traffic Separation Scheme, 3 miles in length, which leads to the S boundary of a Traffic Roundabout. *See* page 190.

44-45 *Delete*

47 *For "2231" read "2282"*

190

11-12 *Delete*

20-56 *Replace by:*

...from the cape.

A Traffic Roundabout, with radius of 2.5 miles and centred on position 44° 06'·2 N., 28° 54'·05 E., has been established in the approaches to Constanța. Its centre is marked by a light-buoy (special mark).

Harbour.—The harbour is protected on its eastern side by East breakwater, a long dog-legged mole and breakwater extending a total distance of over 3½ miles south-south-eastward from close south-westward of Capul Constanța. The southern side of the port is protected by South breakwater, largely consisting of reclaimed land, with an entrance one cable wide close westward of a short spur 2½ cables within the head of East breakwater. There are depths of 14.5 m in the entrance, decreasing to about 9 m at the head of the harbour. (Berth numbers are indicated on the plan.)

Tankers berth at the three piers of Docks 5, 6 and 7 where there are depths of 11 m alongside. Bulk carriers berth alongside the wide quay forming the southern side of Dock 4.

Port development.—Harbour works were in progress (1985) in the area southward of the southern breakwater where new berths have been completed but are not yet fully in use. At Constanta-Sud about 3 miles farther southward a new breakwater extends east-north-eastward from the shore for a distance of about 1½ miles protecting the entrance to the canal to Cernavodă on the River Danube (*see* page 196).

191

2-54 *Replace by:*

Port Turistic Tomis, a well-sheltered yacht marina, lies on the northern side of Capul Constanța.

Navigational aids.—Constanța main light is exhibited from a white pyramidal concrete tower with a blue cupola, 58 m in height, situated 2 miles south-westward of Capul Constanța. A radiobeacon transmits from the lighthouse.

A light is exhibited from a masonry tower at the old head of East breakwater. A horn fog signal is sounded.

Lights are exhibited from grey buildings, 9 m in height, at the head of South breakwater and the short spur on East breakwater, near its old head.

A light is exhibited on each side of the entrance of Port Turistic Tomis.

192

1-6 *Replace by:*

Charts 2231, 2284, plan of Constanța

Anchorage areas Nos. 1, 2 and 3, the limits of which are indicated on the chart, have been established 3 to 7 miles E of Constanța main light. The type of vessel designated to each area is as follows:

No. 1. Vessels less than 40 000 grt excluding tankers.

No. 2. Vessels over 40 000 grt excluding tankers.

No. 3. Tankers and vessels carrying liquefied gas.

In 1982 the holding ground was reported to be good, but there was a strong S current.

Pilots normally board between 1 and 2½ miles to seaward of the harbour entrance but in bad weather, a vessel should form a lee for the pilot about 8 cables south-south-east of the breakwater head.

37-39 *Delete* “, oil” to “Petrol”

49 *Replace by:*

There are several floating cranes of up to 200 tons capacity.

51 *After* “a” *insert* “dry and a”

193

20-22 *Replace by:*

A light is exhibited, at an elevation of 118 ft (36 m) from a red metal framework tower with white bands and a white cupola 72 ft (22 m) in height, situated on Capul Midia.

Midia. In 1981, the construction of a large harbour enclosed by breakwaters, was in progress immediately SW of Capul Midia. The works extend about 2 miles from the shore.

Traffic Separation Scheme. Midia is approached by a Traffic Separation Scheme which leads 5 miles NNW and then $6\frac{1}{2}$ miles NW from Constanta traffic roundabout towards the entrance of Midia harbour.

Recommended Route from Constanța to Sulina, which is indicated on the chart, leads NE from the Constanta traffic roundabout.

Oil platform Gloria, the position of which is indicated on the chart, stands 4 miles NW of this route. This production platform is connected to the shore by a pipeline. Anchoring, fishing or dredging is prohibited within 1 mile of the pipeline.

32 *After* "structure" *insert* " , 17 m in height, "

38-45 *Replace by:*

At Periboina about 8 miles northward of Kituk beacon there is a channel linking Lacul Sinoe with the sea: the depth in the channel is 4 feet (1^m2). There is a beacon at Periboina.

Gura Portița ($44^{\circ} 41' N.$, $29^{\circ} 00' E.$) is the old channel into the lakes but is now silted up.

Gura Portița light is exhibited from a black and white framework tower, 22 m in height, situated on the northern side of the former entrance to the lakes.

Charts 2231, 2835

51 *After* "structure" *insert* " , 21 m in height, "

194

10 *For* "307°" *read* "327°"

196

22 *Add:*

In 1984 a canal was completed between Cernavoda and the new port at Constanța-Sud about $4\frac{1}{2}$ miles southward of Capul Constanța. The bottom width of the canal varies between 70 m and 90 m and the depth is 7.5 m, allowing its use by vessels of up to 5.5 m draught. There will be new ports at Basarabi, Medgidia and Cernavodă, 24 km, 37 km and 64 km, respectively, from the Black Sea entrance.

198

55 *Delete*

199

2-4 *Delete*

10-19 *Replace by:*

Fishing area.—A fishing area extends about 10 miles offshore between points 12 miles west-south-westward and 7 miles northward of the mouth of Gura Sfântul Gheorghe. Mariners are recommended to keep clear of the area.

Offshore buoys.—A mooring buoy, which has no navigational significance is moored about 72 miles eastward of the entrance of Gura Sfântul Gheorghe (page 193). Similar buoys are laid further eastward, but their positions are periodically changed. *See* also page 9.

Charts 2282, plan of Portul Sulina; 2213

32-55 *Replace by:*

Within the town of Sulina, a white stone tower with green cupola (formerly a lighthouse) ($45^{\circ} 09' \cdot 4$ N., $29^{\circ} 39' \cdot 9$ E.), a church, and a water tower are conspicuous.

Navigational aids. Sulina lighthouse stands 3 cables from the extremity of the S mole and a pair of light-beacons stand about 1 cable from the extremities of the N and S moles.

A pair of leading lights, $1\frac{1}{2}$ cables apart, are exhibited from black triangular structures, each with a white central stripe, situated on the N mole about 2 miles NW of the mole heads.

No. 1 light-buoy (safe water) is moored at the entrance to the dredged channel, about $1\frac{1}{2}$ miles ESE of the mole heads. No. 2 light-buoy (starboard hand) and No. 3 light-buoy (port hand) are moored on the NE and SW sides, respectively, of the channel about $\frac{1}{2}$ mile from the mole heads.

Entrance channel.—Depths. The least depth in the channel was 7·6 m (25 ft) in 1980, but the depths are liable to change; silting may occur in the outer portion of the channel during spring and summer floods.

Directions.—The recommended approach route through the former mine danger area Gura Sulina are shown on the chart. Anchoring and fishing in the former mine danger areas N of the entrance to the channel is not recommended and vessels should use the assigned anchorages.

In 1986 it was reported that the limiting draught for ships was 7·0 m (23 ft)

200

2-24 *Replace by:*

Pilotage.—**Regulations.** The pilot station and harbour control is situated at Sulina lighthouse on the S mole. Pilotage is compulsory for merchant vessels except in the case of vessels of less than 120 grt, or 180 grt when crossing the bar in ballast. Pilots meet vessels in Sulina roadstead, close N of No. 1 buoy in a tug with yellow upperworks and are bound...

30 *For "O1" read "the outer"*

201

4-7 *Replace by:*

Anchorage.—The anchorage for vessels waiting to enter the river lies between lines drawn 000° and 121° out to a distance of 2 miles from No. 1 light-buoy.

27 *Replace by:*

...western side of this island, course should be shaped for a position 2 miles northward of No. 1 light-and-whistle-buoy near the seaward end of the northern recommended approach route, and thence southward to the outer light:...

29 *Delete "right"*

32, 36 *For "O1" read "the outer"*

37 *Add:* "In 1980 there was less water than charted both northward and southward of the entrance channel.

206

41 *Add:* There is a port radio station at Reni.

207

25 *After "down." insert:* The anchorage is reported to lie on the southern side of the river, between the 76th and 79th mile posts, eastward of Galați, in a depth of about 23 feet (7 m).

22 *After* "vessels" *insert* "drawing up to 8·2 m"

27 *Add*:

Port radio station.—There is a port radio station at Izmail.

47 *Add*: A line of buoys (spar; special) extends east-south-eastward from a position 2½ miles south-westward of Rybatskiy light (page 209) for 9½ miles.

4-16 *Replace by*:

Navigational aids.—No. 1 light-and-whistle buoy (spar; safe water) is moored 7½ miles NNE of Sulina Light and marks the recommended route for the N approach to Sulina (page 199).

A light is exhibited from a white post, 4 m in height, situated on the N entrance point of Girlo Bistroye.

21-26 *Replace by*:

A buoy (spar; E cardinal) is moored 3 miles east-south-eastward of the entrance to Ochakovskoye girlo.

31 *For* "Coast" *read* "Bukhta Zhebriyanskaya"

36-53 *Replace by*:

Primorskoye light is exhibited from a green metal framework tower, 22 m in height, 2 miles east-north-eastward of Primorskoye church.

Three radar reflectors stand on the coast abreast Liman Sasyk (page 211) between 4½ and 5½ miles north-eastward of Primorskoye church.

A rock with a depth of 10 m over it, marked by a light-buoy (pillar; isolated danger) lies about 10 miles eastward of Primorskoye church. A rocky ridge, with depths of 11·4 m, extends 3 miles southward from a position 9½ miles eastward of the church. A wreck, with a depth of 10 m over it, marked by a light-and-whistle-buoy (N cardinal), lies 9 miles east-north-eastward of the church. For other dangers *see* page 212.

Ust'-Dunaysk. The new port of Ust'-Dunaysk is situated in an artificial creek on the southern side of Bukhta Zhebriyanskaya 5 miles east-south-eastward of Primorskoye church. Bulk imports of grain and bauxite ore handled: the largest ship which can be accommodated is about 30 000 dwt.

Recommended routes.—Route No. 61 shown on the charts is the recommended track for vessels coming from the Bosphorus.

Route No. 59, recommended for all vessels with a draught of less than 5 m, leads in a 060° direction from Ust'-Dunaysk to Bugsko-Dneprovsko-Limanskiy channel (page 233).

There are also routes for lighters from Ust'-Dunaysk to the traffic separation scheme off Odessa (page 217) and for tugs and hydrofoils to Dnestrovskiy liman (page 213).

Anchorage.—Anchorage No. 367 (area A on chart 2213), situated 18 miles east-south-eastward of Primorskoye church, is for large tonnage ships. Depths are 22 m to 29 m and the bottom mud and broken shell.

Anchorage No. 368 (area B on chart 2213), situated 13 miles eastward of Primorskoye church is for all ships. Depths are from 18·6 m to 22·5 m and the bottom sand.

Anchorage No. 369 (area C on chart 2213), situated 7½ miles eastward of Primorskoye church, is for lighter-carriers.

Anchorage no. 370, situated 4½ miles eastward of Primorskoye church, is for ships with draughts of up to 5 m, during storms. Depths are from 11 m to 13 m and the bottom sand.

Anchorage No. 397 (area D on Chart 2213), situated 5½ miles E of Primorskoye church, is for partial unloading of large tonnage vessels.

Permission must be obtained from the harbour master before using these anchorages.

Pilotage is compulsory and is carried out in daylight only. The boarding place is about $1\frac{1}{2}$ miles east-north-eastward of the light-buoy at the entrance to the approach channel. The pilot launch is painted orange with black lettering.

Approach channel.—A light-buoy (pillar; starboard hand) moored in position $6\frac{1}{2}$ miles east-north-eastward of Primorskoye church marks the entrance to the channel: thereafter it is marked by light-buoys (starboard and port hand).

Lights in line bearing $209\frac{1}{4}^\circ$ lead along the channel and additional pairs of lights in line on the same bearing indicate the channel limits.

The channel is 100 m wide as far as latitude $45^\circ 30' N$, thence 80 m wide.

In 1987 the least depth was 8.3 m.

Berths.—**Depths.**—There are two pontoon berths at which vessels lie and discharge into lighters or smaller vessels.

Depths in the harbour are from 11 m to 15 m, mud and sand.

Facilities.—There are three floating cranes, used for discharging cargo.

Fresh water and fuel can be supplied by barge. Limited quantities of provisions are available.

Tugs are available by request in advance.

There are no repair facilities.

Regulations.—The following are extracts from the regulations for the port of Ust'-Dunaysk:

1. Rat guards must be fitted to mooring ropes.
2. Anchor ball must be displayed during daylight: anchor lights must be lit at night or during poor visibility.
3. The flag of the U.S.S.R. must be flown between 0800 and sunset.
4. To prevent launches from fouling a vessel's anchor chain or mooring ropes white lights must be hung over the bows and stern from sunset to sunrise.
5. The following are prohibited:
 - (a) Pumping out all types of petroleum products or sewage;
 - (b) Throwing rubbish, etc. overboard;
 - (c) Lowering of boats;
 - (d) Diving or swimming from the vessel;
 - (e) Using ship's radio (other than VHF for transmitting);
 - (f) Using firearms for sport;
 - (g) Making sound signals.

6. In stormy weather listening watch is to be kept on channel 16.

Navigational aids.—Prorvinskiy reserve light is exhibited from a red metal framework tower, 17 m in height, on the eastern side of the approach channel to Girlo Prorva, on the eastern side of the entrance to Bukhta Zhebriyanskaya, $6\frac{1}{2}$ miles east-south-eastward of Primorskoye church ($45^\circ 31' N$, $29^\circ 37' E$).

Prorvinskiy main light is exhibited from a grey metal framework tower, 92 feet (28^m0) in height, situated on the western side of Girlo Prorva, about $1\frac{1}{4}$ miles south-westward of the reserve light at the entrance.

A light-and-whistle-buoy (pillar; E cardinal) is moored about 4 miles eastward of Prorvinskiy reserve light.

55 For "Prorvinsky" read "Prorvinskiy reserve"

210

6 Add: A light-buoy (safe water), marking the entrance to the channel, is moored 2 miles north-eastward of Prorvinskiy reserve light.

18-19 Delete

211

1 Replace by:

Chart 2213, 2231

Area periodically dangerous for navigation.—No. 709 danger area lies in the north-western part of the Black Sea covered by this chapter, but becomes

dangerous only periodically; *see* page 14 and Appendix V. Its north-western limit is 40 miles offshore.

12 *Add*: A dangerous wreck, the position of which is doubtful, lies 5 miles south-westward of Ostrov Zmeinyy; a wreck with a depth of 26 m over it lies about 12 cables farther south-eastward.

Charts 2231, 2213

15-16 *Delete* "fog" to "and a"

22 *Add*: **Pollution of the sea.**—Due to the non-tidal nature of these waters, national authorities are extremely rigorous in the application of anti-pollution regulations. *See* page 15.

36 *Add*: Kataranskiy light is exhibited from a structure, 15 m in height, on the shore of Liman Sasyk 8½ miles north-eastward of Primorskoye church.

212

16-18 *Replace by*:

...its south-eastern side by a light-buoy (spar; E cardinal). This patch lies at the southern end of a rocky...

20 *Add*: A wreck, with a depth of 12 m over it, lies 3½ miles east-south-eastward of Shagany light.

Firing danger area.—Firing danger area (No. 93) lies close westward and south-westward of this buoy; *see* page 14 and Appendix V.

23-25 *Replace by*:

Burnas light is exhibited from a conical four-sided metal framework structure, 14 m in height, close to Mys Burnas.

28 *For* "8½" *read* "8"

29 *Add*: A wreck, with a depth over it of 5·1 m lies south-eastward of Budaki light, and is marked close eastward by a buoy, (pillar; isolated danger). A conspicuous chimney stands 7 miles NE of Budaki Light

34-35 *Delete*

"A" to "1963"

37-41 *Replace by*:

...end of the bank is marked by a light-buoy (pillar; N cardinal), the southern end by a buoy (pillar; S cardinal).

A group of 4 light-buoys (special) is centred 1½ miles north-westward of the northern end of Banka Dnestrovskaya.

42-44, 48-52 *Delete*

54 *Delete* "and upon" to "stands"

56 *Replace by*:

...the southern end of Banka Dnestrovskaya.

213

2-5 *Replace by*:

A patch of 33 feet (10 m) lies 11½ miles east-north-eastward of the southern end of Banka Dnestrovskaya: it is marked on its south-eastern side by a light-buoy (spar; E cardinal).

11-13 *Replace by*:

...the approaches to Port Odessa (page 220). Former mine danger areas have been mentioned on page 211. Anchoring and fishing are prohibited in the close vicinity of Dnestrovsko-Tsaregradskoye girlo.

Anchorage.—Anchorage may be obtained in area No. 350 indicated on the charts 2½ miles north-eastward of Dnestrovsko-Tsaregradskoye girlo, or in the open roadstead one mile east-south-eastward of that entrance.

23 *Add*: A bridge, which can be raised to give a vertical clearance of 26·5 m, crosses Dnestrovsko-Tsaregradskoye girlo.

38 *Replace by:*

...for vessels drawing up to 5·2 m with a masthead height under 26·5 m. Larger vessels must...

214

3 *Replace by:*

In 1982, the least depth in the approach channel to Dnestrovsko-Tsaeregradskoye girlo was 3·8 m over a minimum width of 80 m.

8-9 *Replace by:*

...exhibited from a red four-sided metal structure, 20 m...

25-32 *Replace by:*

The channel is entered between No. 1 light-buoy (pillar; starboard hand), moored one mile eastward of the front light-structure, and No. 2 buoy (spar; port hand). Thereafter the channel is marked by light-buoys and buoys (starboard and port hand).

A 0·5 m patch half a mile eastward of the entrance is marked by a buoy (spar; isolated danger).

35 *Replace by:*

...side of the entrance; pilots are embarked 2 miles eastward of it. Vessels waiting to enter should anchor 3 miles north-eastward of the entrance.

46-47 *For* "11½ feet (3^m5), in 1966" *read* "2·4 m in 1987; the width of the channel is 60 m"

215

12-14 *Replace by:*

Anchoring and fishing are prohibited in an area across Dnestrovskiy liman abreast the south-eastern end of Belgorod-Dnestrovskiy.

Port Belgorod-Dnestrovskiy.—The port is situated at the south-eastern end of the town. It is protected by a short mole projecting south-eastward from the seaward end of an angled quay, which provides six berths with maximum depths alongside of 7 m. In 1978 harbour works were in progress at the southern end of the port to provide additional berths alongside reclaimed land.

Port facilities.—Timber and general cargo are handled. Diesel fuel and water can be supplied, and small repairs carried out. 27-ton cranes and tugs are available.

44 *Add*

A conspicuous television mast stands near the village.

47 *Add:*

A conspicuous tower stands 1½ miles NNE of this light.

216

8-29 *Replace by:*

A buoy (spar; E cardinal), moored 1½ miles south-south-westward of Il'ichevsk light and 3½ cables offshore, marks the seaward end of a pipeline.

Directions.—The recommended route between Dnestrovsko-Tsaeregradskoye girlo and Port Il'ichevsk (*see* under) lies 2 miles offshore on a course of 033°/213° and is indicated on the charts.

Chart 2213, plan of Port Il'ichevsk and approaches

Port Il'ichevsk.—**Sukhoy liman.**—**Navigational aids.** Port Il'ichevsk comprises the outer and inner basins of Sukhoy liman, which are connected by a main and minor channel passing eastward and westward, respectively, of Ostrovka Dambouyy, an artificial islet about one mile north-westward of the port entrance (46° 19' N, 30° 40' E). From northward and westward the port is protected by high land, and from southward it is protected from the sea by two converging sandy spits, between which lies the dredged entrance channel

confined within two small breakwaters. With strong winds between north-east and south there is a swell in the entrance channel, making entry difficult in these conditions.

From the offing Sukhoy liman appears as a valley, on the south-western side of which is the town of Aleksandrovka, with a factory, some chimneys and tanks southward of it, and a conspicuous building standing 11 cables south-westward of the harbour entrance. There are conspicuous factory chimneys $1\frac{1}{2}$ miles westward, $1\frac{1}{2}$ miles north-north-eastward and 2 miles north-north-westward of Il'ichevsk light.

Il'ichevsk light is exhibited from a white round concrete tower with red bands, 18 m in height, situated on the head of the southern breakwater, nearly $1\frac{1}{2}$ miles east-south-eastward of the front leading light-structure (*see below*). A radio-beacon transmits from the light-tower and a fog signal is sounded from the root of the breakwater. A neon floodlight, reported to be visible from 16 miles to seaward, stands 4 cables SW of Il'ichevsk light.

Severnny Portovyy light is exhibited from a white metal framework tower, 7 m in height, on the northern entrance point.

Yozhnyy Portovyy light is exhibited from a similar structure on the southern entrance point.

The approach to the harbour is indicated by a light-buoy (spar; safe water) moored $1\frac{1}{2}$ miles...

45-46 *Replace by:*

The channel is entered between No. 1 light-buoy (spar; starboard hand), moored $4\frac{1}{2}$ cables eastward of Il'ichevsk light, and No. 2 light-buoy (spar; port hand). From there inwards the channel is marked by light-buoys and buoys (starboard and port hand). A buoy (spar; special) is moored half a cable south-westward of No. 2 light-buoy.

217

1-26 *Replace by:*

Chart 2213, plan of Port Il'ichevsk and approaches

The main entrance to the inner basin of Sukhoy liman is marked by a pair of leading light-beacons situated on the north-eastern side of that basin, 8 cables north-north-westward of the artificial islet in the middle of the harbour. Both beacons are black metal framework structures, carrying white rectangular day-marks with black stripes. The front beacon is 7 m in height, and the rear one 16 m. The lights in line bear $345\frac{1}{2}^{\circ}$ and lead through the main entrance channel eastward of the islet.

The front light of another pair of inner basin leading lights is situated $2\frac{1}{2}$ cables north-eastward of the islet. In line, astern, bearing $129\frac{1}{2}^{\circ}$ they lead through the middle part of the basin.

Lights are exhibited on either side of the main entrance to the inner basin, from white metal framework towers, 6 m in height. Lights are also exhibited on either side of the inner channel to the inner basin, westward of Ostrovka Dambouyy.

In addition to the above-mentioned lights, a number of other lights are exhibited from the various quays on both sides of the outer basin.

Quays.—The south-eastern, south-western and western sides of the outer basin are quayed and there is a fish quay on the north-eastern side. Mooring buoys lie close north-westward of the entrance and about one cable westward of the $345\frac{1}{2}^{\circ}$ leading line.

The south-western side of the inner basin is also quayed. A ferry pier extends about 240 m south-south-eastward from a position 2 cables westward of the front $345\frac{1}{2}^{\circ}$ leading light-structure in the inner basin.

Depths.—In 1985, the depth on the axis of the dredged channel was 12·2 m; the channel is 140 m wide. The normal limiting draught for entry is 11 m, and permission from the harbour authority is required for vessels of deeper draught to enter. In 1982 the depth in the outer basin was 11·4 m; in the inner basin the depths were 9·4 m in the southern part and 9·0 m in the northern part. The depths alongside the quays are between 9·1 m and 11·5 m.

36–50 *Replace by:*

The port control station is in a building painted in red and white bands, situated near the northern entrance point of the harbour. The **port radio station** and surveillance radar are at the same site. All movements of vessels in the roadstead, the entrance channel and the harbour channels are regulated from the port control station. Traffic control lights are exhibited from a mast, 52 m in height, standing close northward of the port control station. A **green** light indicates that the scheduled movement is permitted; a **red** light indicates that the movement is prohibited. **Red** lights mark the top of this mast.

Speed in the entrance channel is limited to 6 knots, or the minimum necessary to maintain steerage way.

Chart 2213, with plan of Port Il'ichevsk and approaches; 2212

Directions.—Traffic Separation.—The recommended track for a vessel approaching Port Il'ichevsk from south-westward is on a course of 033°, as indicated on the charts. A traffic separation scheme for the approach from south-eastward to this port, with a branch leading north-north-westward to Odessa, is indicated on the charts. This scheme is IMO adopted; *see* page 14. The south-eastern end of this scheme lies at the end of the recommended routes between these ports and Kerchenskiy proliv and Novorossiysk, and is marked by *No. 1* light-buoy (spar; E cardinal) moored 21 miles east-south-eastward of Il'ichevsk light.

The traffic roundabout where the onward route to Odessa branches north-north-westward and that to Port Il'ichevsk branches west-north-westward is marked by a light-buoy (Il'ichevsk Turning buoy) (spar; special), moored 11 miles east-south-eastward of Il'ichevsk light.

The branch to Port Il'ichevsk is marked at its eastern end by *No. 2* light-buoy (spar; E cardinal).

For the traffic separation scheme between Il'ichevsk and Odessa, *see* page 219.

Traffic Control System. A traffic control system is in operation for vessels proceeding to, or sailing from, Port of Il'ichevsk, Odessa (page 226), Port Yuzhnyy (page 228) and Kherson (page 242). For details *see Admiralty List of Radio Signals*.

Anchorage area.—Dumping ground.—Spoil ground.—Anchorage area No. 352 is situated southward of the harbour approach, with its centre 2 miles south-south-eastward of the signal station; the bottom is sand. No. 351 anchorage area, lies about 2½ miles farther south-eastward.

A submarine pipeline, marked by piles, extends eastward from the coast 1½ miles south-south-westward of Il'ichevsk light: its seaward end is marked by a buoy.

54–56 *Replace by:*

A dumping ground for explosives lies close offshore nearly 2½ miles north-eastward of the harbour entrance.

A spoil ground lies 2 miles southward of the harbour entrance.

218

1 *Replace by:*

Chart 2213, plan of Port Il'ichevsk and approaches

2–3 *Delete*

4 *For "29 feet (8^m8)" read "9·6 m"*

6-27 *Replace by:*

Port facilities.—The port was originally used primarily for the shipment of coal, iron ore and molasses in bulk, but since 1976 has dealt with general cargo, including much container and Ro-Ro traffic. It is suitable for vessels up to 260 m in length drawing less than 11 m. The quays are equipped with many container gantries and cranes of up to 30-ton capacity. Berth Nos. 1 to 31, which line the south-western side of the outer harbour, are rail served; the port is connected by rail and road with Odessa.

All types of fuel, and fresh water, can be obtained alongside or by lighter. Fresh provisions are available.

There are many modern tugs, harbour launches and lighters. In addition a salvage vessel, an ice-breaker and fire-fighting craft are normally based on the port. Several floating cranes are available, the largest being of 300-tons capacity.

Large repairs to hulls, equipment and engines can be undertaken. There are three floating docks, the largest with a 60 000-ton capacity.

32 *Add: Charts 2213, 2212*

41 *Add...* and is radar conspicuous.

52-53 *Replace by:*

A buoy (pillar; E cardinal) is moored on the 10 m contour 4 cables south-eastward of the point.

56 *Replace by:*

A light-buoy (spar; safe water), moored $1\frac{1}{2}$ miles east-south-eastward of Mys Bol'shoy Fontan, marks a turning point in the traffic separation scheme between Il'ichevsk and Odessa (page 219).

219

1 *Add: 2205*

2-4 *Delete*

8 *Add:* A conspicuous five-storey building and a red roofed tower, 20 m in height, amid blocks of flats, stand close inland $2\frac{1}{2}$ and 4 miles, respectively, north-north-eastward of Mys Bol'shoy Fontan. A conspicuous isolated building stands close north-east of the tower.

10-12 *Replace by:*

A conspicuous radio tower and a radio tower, from both of which *red* obstruction lights are exhibited, are situated $2\frac{1}{4}$ miles north-westward and three-quarters of a mile west-north-westward, respectively, of Lanzheronskiy light-structure (*see below*). The charted positions of these radio structures are approximate.

16 *Replace by:*

A buoy (spar; E cardinal)...

19-29 *Replace by:*

Traffic Separation.—A traffic separation scheme, with $2\frac{1}{2}$ -cable wide lanes, divided by a line about $1\frac{1}{2}$ miles offshore, is established between the approaches to Il'ichevsk and Odessa; it is indicated on chart 2212. This scheme is IMO adopted; *see* page 14. For traffic separation schemes south-eastward of these ports, *see* pages 217 and 221.

30 *For "An" read "A cable"*

33-34 *Delete* ", its" to "chart"

37 *Delete* "also"

39-40 *Replace by:*

A buoy (spar; E cardinal)...

42 *Add:* Buoys (spar; E cardinal) are moored half a mile northward and half a mile southward of the limits of the area.

220

19 *Replace by:*

...structure.

A conspicuous flare is exhibited $1\frac{1}{2}$ miles inland about 3 miles west-north-westward of Vorontsovskiy light.

Luzanovskiy light is exhibited from a white round concrete tower with a black band, 10 m in height, on Mys Severnyy Odesskiy.

24 *Add:* The pilot station is situated near the root of Reydivyy mol.

221

1 *Add:* 2205

4-5 *Replace by:*

...(8^m8), is marked by a light-buoy (spar; S cardinal), moored $1\frac{1}{2}$ miles east-north-eastward of Voront-...

12-15 *Replace by:*

A buoy (spar; S cardinal) is moored on the edge of the coastal bank $1\frac{1}{2}$ miles south-south-eastward of Mys Severnyy Odesskiy. A buoy (spar; isolated danger) marks a 31 foot (9^m4) wreck $2\frac{1}{2}$ cables east-south-eastward of the same point.

A 27 foot (8^m2) wreck, $3\frac{1}{2}$ miles south-south-eastward of Mys Severnyy Odesskiy, is marked by a light-and-whistle-buoy (pillar; isolated danger). A small prohibited area lies close northward of the wreck.

35-36 *Replace by:*

Anchorage area No. 354, for large vessels, is situated with its centre 5 miles east-south-eastward of Vorontsovskiy light-structure. Anchorage area No. 355 for smaller vessels is established northward of the alignment of the Odessa and Vorontsovskiy light-structures ($250\frac{1}{2}^{\circ}$), with its centre about $1\frac{1}{2}$ miles north-eastward of Vorontsovskiy light.

Directions.—Traffic Separation.—For the traffic separation scheme between Il'ichevsk and Odessa, *see* page 219, and for the recommended route between Odessa and Dneprovskiy liman (for Kherson), *see* page 230.

A traffic separation scheme, indicated on the charts, has been established south-eastward of the approaches to Odessa; it joins the scheme described on page 217 at the light-buoy moored 11 miles east-south-eastward of Il'ichevsk light. This scheme is IMO adopted; *see* page 14. The inner end of the scheme, marked by a light-buoy (N cardinal), lies about 4 miles south-eastward of the harbour entrance, whence course should be set as requisite to enter. If approaching along the alignment of Vorontsovskiy leading lights, bearing $250\frac{1}{2}^{\circ}$ *see* caution above.

A recommended track for vessels proceeding from seaward to Port Yuzhnyy and Dneprovskiy liman (for Kherson) is described on page 228.

222

1 *Add:* 2205

2-3 *Delete*

18-19 *Delete* "within" to "and"

20 and subsequently for "Odesskiy breakwater" *read* "Staryy Volnolom"

39 *For* "3" *read* "4"

41 *Add:* A light is exhibited from a metal framework structure, 7 m in height, on the northern end of the breakwater.

53-56 *Replace by:*

Signal station. A signal station stands near the head of Karantinnaya Mol.

223

2-26 *Replace by:*

Entrances,—Navigational aids,—Prohibited area.—The inner roadstead may be entered as follows;

South entrance, Between Reydovyy Mol and E end of Staryy Volnolom,

Middle entrance, Between W end of Staryy Volnolom and S end of Novyy Volnolom,

North entrance, Between N end of Novyy Volnolom and Mol Neftyanoy Gavan,

A dredged channel, 100 m wide and with a least depth on the centre line of 11·8 m in 1987, leads from Odesskiy zaliv through the middle entrance, it commences about 3 cables ENE of Vorontsovskiy Light. Another dredged channel with a least depth of 9 m in 1986 leads to the N entrance.

Leading light-beacons for the outer part of the dredged channel leading to the middle entrance stand...

36-37 *Replace by:*

Two light-buoys (pillar; special) are...

224

5-11 *Replace by:*

Leading-lights have been established for vessels using the dredged channel that leads to the north entrance.

23-24 *Replace by:*

...the entrance to the basin is dredged to 11·8 m (1987) and there are depths of 9·8 m to 13·4 m alongside the wharves.

37-43 *Replace by:*

...12·4 m in the entrance to Prakticheskaya gavan': a light-beacon marks shoal water off the head of Potapovskiy mol. There are depths of 3·5 m to 10·8 m within the basin.

50 *For* "a detached breakwater, partly submerged" *read* "Zavodskiy mol"

225

6 *Add:* A light is exhibited from each end of Zavodskiy mol.

There is a foul area westward of Zavodskiy mol and a shoal patch with a least depth of 2·7 m over it, situated 150 m south-westward of the northern end of the mole, is marked by a light-buoy (pillar, E cardinal) and a buoy (spar, E cardinal).

14-18 *Replace by:*

...eastward from the shore to a T-head 2½ cables long. A tower stands on the south-western end of the T-head and a mooring buoy lies off it.

22 *After* "on the" *insert* "south-western"

23 *Add:* A light is exhibited from a grey metal column, 10 m in height, at the head of the north-eastern arm of the mole.

24 *After* "for the" *insert* "south eastern"

31 *Add:* In 1985, the least width of the approach channel to the oil berths was 100 m, and the least depth 13·8 m.

32-35 *Replace by:*

Two piers, one cable in length, project eastward from a position 3 cables southward of the above oil wharf. There are depths of 12·6 m alongside the outer half of Sakharnyy pirs, the northern pier. The main grain discharge berths are on this pier.

226

37 *Replace by:*

...five floating cranes (1982).

47 *After* "a" *insert* "coast and port"

23 *Add: 2205*

1 *Add: 2205*

4 *Add: A conspicuous obelisk stands close N of Mys Dofinovskiy.*

10-11 *Replace by:*

A buoy (spar; S cardinal) is moored close seaward of each outer corner of the foul area.

Prohibited anchorage. Anchoring and fishing are prohibited in an area about $1\frac{1}{2}$ miles square centred 2 miles eastward of Mys Dofinovskiy. A wreck within this area is marked by a buoy (spar; isolated danger).

13 *For "lake" read "a lagoon"*

16-21 *Replace by:*

...gullies. The lagoon is separated from the sea by a narrow sandy beach, three quarters of a mile long.

Chart 2006

Port Yuzhnyy a major port for the transshipment of oil and chemicals was under development in 1988. Quays in the S part of the lagoon were in use and further development in the N part of the lagoon was taking place. On completion it will be the largest port in southern U.S.S.R.

Port limits extend seaward to a radius of 2 miles from the coast radar station at Port Yuzhnyy.

Anchorage Nos. 356, 357 and 358 lie 4 miles SW, 2 and 4 miles ESE, respectively, of the harbour entrance. Area No. 356 is designated for gas and chemical carriers; area No. 357 is designated for gas and chemical carriers, and dry cargo vessels and area No. 358 is designated for dry cargo vessels.

There are depths of between 14 to 22 m in these anchorages, the bottom consists of sand, mud and shells.

Chart 2206

Entrance channel.—A dredged channel $1\frac{1}{2}$ miles long and 180 m wide dredged to 14.0 m (1988) is entered between No. 1 light-buoy (spar; starboard hand) moored on the eastern side $1\frac{1}{2}$ miles south-south-eastward of Grigor'yevka light and No. 2 light-buoy (spar; port hand). Thereafter the channel limits are marked by light-buoys (starboard and port hand). Protection is provided by two moles, the western one 400 m long and the eastern one 540 m long. Lights are exhibited on the roots and the heads of the moles.

Chart 2212

Vessels should approach the southern end of the entrance channel steering $070\frac{1}{2}^{\circ}$, with Vorontsovskiy light-structure (page 221) and the light-structure 12 cables west-south-westward of it in line, astern, bearing $250\frac{1}{2}^{\circ}$.

Chart 2206

Vkhodney front leading light-beacon, 17 m high, stands on raised ground at an elevation of 47 m, $2\frac{1}{4}$ miles north-north-eastward of the entrance to the port. It consists of a white and orange metal framework tower. The rear light-beacon, 6 cables north-north-eastward, is a similar tower, 29 m high, standing at an elevation of 69 m. In line, bearing 013° , the light-beacons lead through the entrance channel into the port.

There is a port control radar station, incorporating a signal station, in a large concrete tower on the eastern side of the entrance to the port. The radar tower may be used for pilotage purposes under the direction of the pilot, but the Master retains responsibility.

Port Yuzhnyy.—Nos. 1, 2, 3 and 4 quays, having a total length of about 1000 m, are situated on the western side of the port, numbered from southward.

No. 5 berth is on the E side.

Nos. 1 and 2 quays are for general cargoes: depths alongside are 11·8 m to 14·6 m at No. 1 and 13·6 m to 14·8 m at No. 2. No. 3 quay is the berth for handling liquid ammonia and phosphoric acid: depths alongside are 14·8 m to 15·7 m. It is reported that No. 4 berth is used for handling chemicals and No. 5 for coal and ore.

Depths in the approaches to the quays are 13·4 m to 15·4 m and the northern limit of the dredged area is marked by Nos. 13 and 14 light-buoys (pillar; S cardinal).

There is a quay with a length of 155 m and a depth alongside of 6·5 m to 7 m, for use by auxiliary vessels, on the eastern side of the port, just inside the entrance.

The harbour offices are at the southern end of No. 1 quay.

Container and bulk berths are under construction on the eastern side of the harbour.

Facilities.—Fresh water is laid on to the quays.

Fuel and provisions are difficult to obtain.

There are three tugs; the largest of 2500 hp escorts vessels from the anchorage to the harbour entrance and the two smaller ones assist vessels to berth.

De-ratting can be carried out.

Developments. In 1984 it was reported that the N part of the harbour was being dredged to a depth of 16 m to accommodate vessels visiting the refinery in that part of the harbour.

Regulations.—A copy of the Port Regulations should be obtained on arrival at the anchorage. The following are extracts:—

Grigor'yevka light is exhibited from a black round structure on a white round concrete tower, 15 m in height, situated near the south-western corner of Adzhalskiy liman, 4½ miles east-north-eastward of Mys Dofinovskiy.

Approaches to Port Yuzhnyy. A Traffic Separation Scheme has been established from the Traffic Roundabout, 11½ miles ESE of Il'ichevsk, in a N direction towards Port Yuzhnyy, joining the Odessa—Kherson route in a Precautionary Area situated about 5 miles SW of Port Yuzhnyy.

Gas container ships have precedence over all other ships in this Scheme, except for warships and patrol craft. When gas container ships are using this traffic separation scheme, the movement of other vessels in the opposite direction is prohibited.

While in the Precautionary Area vessels should keep a special lookout, especially for vessels proceeding on the Recommended Route (070°–250°) between Odessa and Port Yuzhnyy.

Anchoring is prohibited on both sides of the Traffic Separation Scheme, in an area the extent of which is shown on the chart.

When proceeding from seaward, vessels intending to use this scheme must obtain permission from Il'ichevsk Port Control, which also exercises control within the Precautionary Area.

Pilotage is compulsory for foreign ships. The pilot for the outer approach boards one mile northward of the light-buoy marking the centre of the traffic roundabout east-south-eastward of Il'ichevsk. Vessels may be directed to No. 356 anchorage, 4 miles south-south-westward of Port Yuzhnyy to await the harbour pilot. Requests for pilot and tug assistance should be made to Inflat Il'ichevsk, through Odessa Radio, at least 48 hours before arrival off Il'ichevsk. Il'ichevsk Radio can be contacted on VHF channel 16 on approach. Movements of gas carriers of over 10 000 dwt are restricted to daylight hours: movements of other vessels are allowed day and night provided that visibility is more than 2 miles.

Conspicuous landmarks.—A conspicuous chimney stands in the village of Grigor'yevka, on the western side of the entrance to the port. Large storage tanks and towers stand behind the quays on the western side of the port. Another conspicuous chimney, 88 m in height, stands about 11 cables north-

north-westward of the radar tower on the eastern side of the entrance to the port.

Shoals.—Buoyage.—Pipeline.—Light-buoys (spar; N cardinal) mark shoal patches of 25 feet (7^m6) and 21 feet (6^m4) about 3 miles southward of Grigor'yevka light.

A light-buoy (pillar; isolated danger) marks a 32-foot (9^m7) wreck 2½ miles south-south-westward of the same light.

A light-buoy (pillar; E cardinal) marks a 29-foot (8^m8) patch 2¼ miles southward of the same light.

A submarine pipeline is laid south-westward for a distance of about 2 miles from the village of Grigor'yevka, westward of the entrance to the port.

The area bounded by lines drawn parallel with and 5 cables each side of the 250½° leading line, between meridians 30° 52' E. and 31° 04' E., is a regulated area for the port. All vessels must request permission before entering it.

Before entering Yuzhnyy vessels should request permission to do so from the port radio station 2 hours previously: before leaving vessels should request permission 30 minutes previously.

The maximum speed allowed in the entrance channel is 6 knots and within the port 4 knots: in adverse weather, tug assistance will be given in the entrance channel.

Vessels carrying liquefied gas enter and leave port preceded by a tug equipped for fire-fighting, which should have been requested 24 hours previously: they must keep all other vessels informed by R/T (channel 16) of their intended route: such other vessels must take care not to hamper the movements of the gas carrier and must not approach her within one mile.

Communication with ships is carried out on VHF channel 13 (calling on channel 16). The callsign of the radio station at Port Yuzhnyy is "Portnadzor Yuzhnyy". All ships at anchor within the regulated area (see above) or alongside in the port must keep continuous listening watch on VHF channel 16.

Port Yuzhnyy to Mys Sychavskiy.—From the entrance to Yuzhnyy the coast trends eastward and...

29 *Add:* A conspicuous chimney, 80 m in height, stands half a mile north-westward of Sychavka village.

32-40 *Replace by:*

Sychavskiy light is exhibited from a grey metal framework tower, 10 m in height, on the roof of a white building, situated about ¼ mile W. of Mys Sychavskiy.

Area No. 702 lies 12 miles S. of the same point. *See* Appendix V.

A 14 ft (4·3 m) patch lies about 1 mile SW of the point.

A buoy (isolated danger) marks the...

43-52 *Delete*

229

1 *Add:* 2205

3-4 *Replace by:*

...marked by buoys (spar; N cardinal).

A submarine cable is laid from the shore 2 miles eastward of Mys Dofinovskiy in a southerly direction for 10 miles, thence eastward to a point near the northern extremity of Tendrovskaya kosa (page 254).

25-27 *Replace by:*

...buoy (pillar; S cardinal).

38-41 *Delete*

52 *Replace by:*

...side by a light-buoy (pillar; N cardinal), lies 2 miles...

56 *Replace by:*

Light.—Karabush light is exhibited from a white round concrete tower with a black cylinder, 16 m in height, situated close northward of Mys Karabush.

230

1 *Add:* 2205

2-3 *Delete*

11 *For* "the" *read* "Berezanskiy"

26 *Replace by:*

A light is exhibited, and a radiobeacon transmits, from a tower

32-35 *Replace by:*

Anchorage.—Anchorage area No. 360 lies $1\frac{1}{4}$ miles south-eastward of Mys Adzhiyask.

232

38-40 *Replace by:*

8. The speed of the vessels in the channel must not exceed 10 knots.

233

16 *After* "227" *insert* "and 228"

29 *For* "34 feet (10^m4) in 1968" *read* "10·4 m in 1984"

31 *For* "Khersonskiy" *read* "Khersonskiy Morskoy"

35-36 *Replace by:*

...Kherson. *See* page 240.

234

39-41 *Delete* "The westernmost" to "seconds."

49 *After* "structure" *insert* " , fitted with a radar reflector,"

235

4 *For* "No. 1 spoil ground" *read* "A spoil ground"

8 *Add:*

Prohibited areas.—For prohibited area indicated on the chart, surrounding the island, *see* page 237.

A small prohibited area lies one mile westward of Kinburnskiy light.

23-24 *Replace by:*

Berezanskiy light-buoy (spar; safe water)...

28 *Replace by:*

...accordance with the IALA Maritime Buoyage System: they are numbered consecutively from seaward.

37-39 *Replace by:*

No. 7 light-buoy (spar; N cardinal) is moored on the southern side of the junction of the first and...

48-49 *Replace by:*

...a white round concrete tower with an orange daymark, 57 feet (17^m4) in height, situated about 9 cables eastward of the western ex-...

53-54 *Replace by:*

...light is exhibited, at an elevation of 135 feet (41^m1), from an orange fronted square metal framework tower, 52 feet (15^m8) in height, situated...

236

3 *Add:* On request an auxiliary light is exhibited along the leading line in daylight in poor visibility, from the rear light-tower.

4 *Replace by:*

No. 16 light-buoy (spar; port hand) is moored on the...

18-20 *Replace by:*
...line bear 092°.

No. 22 light-buoy (spar; port hand) is moored...

33-34 *Replace by:*

Directions.—From Berezanskiy light-buoy, situated on the northern side of the entrance of the first...

38 *Delete* "and-whistle-"

41 *Delete* "red can"

237

15-21 *Replace by:*

...prohibited in an area 8 cables wide, indicated on the chart, extending 2½ miles southward from Mys Ochakovskiy.

Navigation is prohibited in an area, indicated on the chart, eastward, southward and westward of Pervomayskiy ostrov.

Anchorage area No. 361 lies 7 miles eastward of Mys Ochakovskiy.

238

3 *Replace by:*

Spoil grounds, whose positions can be seen on...

19 *Replace by:*

...height, the side facing the leading line painted orange,...

23 *Replace by:*

...rectangular daymark painted orange, situated 2½ miles east-north-...

25 *For* "white" *read* "red"

29 *Replace by:*

No. 32 light-buoy (spar; port hand) is...

32-36 *Replace by:*

...reaches; it marks the remains of a former light-beacon close north-westward of it. A foul patch lies close southward of the junction.

37 *For* "Ochakovskoye" *read* "Dneprovsko-Limanskiy"

39-45 *Replace by:*

...kosa. It is marked by two pairs of leading light-beacons...

239

13-15 *Replace by:*

...summer, they are exhibited only when required. No. 48 light-buoy (pillar; port hand) is moored on the northern side of the channel and marks the junction of the fifth and sixth reaches

17 *Delete* "red and white"

21-23 *Replace by:*

...eastward, passing between the light-buoys at the junction of the fourth and fifth reaches, bringing...

32 *Add:* Due to shoaling at the edges of the fourth and fifth reaches, vessels are advised to keep strictly in the centre of the channel in these reaches and to avoid passing when possible.

240

40 and subsequently. *For* "Khersonskiy Kanal" *read* Khersonskiy Morskoy Kanal"

46-51 *Replace by:*

...by light-buoys and buoys in accordance with the IALA Maritime Buoyage System. They are numbered consecutively from seaward.

The least depth in Khersonskiy kanal was 8 m in 1984; its width is 100 m except in the third reach where it is 90 m.

241

2-5 *Replace by:*

Nos. 41 and 42 light-buoys mark the junction of the first and second reaches.

15 *Replace by:*

...the light-buoys marking the channel are withdrawn; they are also lit on demand by day in reduced visibility.

A reverse transit, has been established for this section of the channel, the front light exhibited from a rectangular concrete tower, 15 m in height with two black targets, each having a white vertical stripe, on the eastern face of the tower, situated $3\frac{1}{4}$ miles east-south-eastward of the middle light-structure of the Adzhigol'skiy leading lights, described on page 238. This middle light-structure is also the rear mark of the reverse transit; in line the lights bear 289° .

25 *Add:* These lights operate only during the summer.

26 *Replace by:*

Anchorage area No. 366 has been established on the vicinity of the...

28 *For* "these areas" *read* "this area"

31-37 *Replace by:*

Nos. 71 and 72 light-buoys mark the junction of the second and third reaches.

242

8 *After* "light-beacons" *insert* " , see page 241, "

40-41 *Replace by:*

Navigational aids.—Caution.—The bends of Rvach kanal and Reka Ol'khovyy Dnepr are marked by light-buoys and lights on wooden posts on the river...

43-44 *Replace by:*

In addition there are numerous pairs of leading light-beacons for the various reaches, whose positions and bearings in line can best be seen on the chart.

243

12 *Replace by:*

...with maximum depths alongside of 8·4 m, for berthing the...

20 *For* "Two" *read* "Three"

23-25 *Replace by:*

Prohibited anchorages.—Anchoring and fishing are prohibited in three areas across Reka Dnepr, on either side of its junction with Reka Koshevaya, and 2 miles south-westward of the same point.

45 *After* "a" *insert* "coast and port"

46-48 *Delete*

244

15 *Add:*

Dneprobugskiy.—In 1979 the new port of Dneprobugskiy, on the east bank of the river near Nikolayev, was nearing completion. A deepwater quay, 300 m in length, is already in use. When dredging has been completed, ships up to 70 000 tons will be accommodated.

246

23 *Delete* "in accordance" to "22-24"

248

45 *Delete* "in accordance" to "22-24"

253

3 *Add:*

Pollution of the sea.—Due to the non-tidal nature of these waters, national authorities are extremely rigorous in the application of anti-pollution regulations. See page 15.

11-18 *Delete*

20-22 *Replace by:*

For **bombing danger area** (No. 704) 4 miles south-eastward of Kinburnskiy light, see Appendix V.

37 *Add:* Pokrovskiy Light stands on the S. shore of Kinburnskaya Kosa, 3 miles N of Ostrov Kruglyy.

254

28 *For "A" read "Tendrovskiy Severnyy"*

35 *Add:* Tendrovskiy Yuzhnyy light is exhibited on a narrow part of the spit, 4 miles south-south-eastward of Tendrovskiy light.

39 *Add:* Three radar reflectors on metal beacons, about 5.5 m in height, stand on Tendrovskaya kosa, between 8 and 9 miles westward of Tendrovskiy-Zheleznyy light.

45 *Add:* For **firing practice danger area** (No. 92) 3 miles south-south-eastward of Tendrovskiy light, see Appendix V.

53-55 *Replace by:*

Prohibited anchorage.—**Cables.**—**Danger areas.**—A small area, about 4 cables square, in which anchoring and fishing are prohibited, lies off the eastern side of the head of the peninsula.

A submarine cable is laid westward from the northern end of Tendrovskaya kosa to the vicinity of Lanzheronskiy light. Another submarine cable is laid from the same position southward and westward along Tendrovskaya kosa; both cables are indicated on the chart.

For **bombing danger area** (No. 706) 15 miles west-south-westward of Tendrovskiy light, see Appendix V.

256

20 *Add:*

Platforms.—Lights are exhibited from platforms situated north-westward of Mys Tarkhankut. A radiobeacon transmits from one of these platforms, situated between the north-west and south-east-bound recommended tracks 39 miles west-north-westward of Mys Tarkhankut.

A buoy (special mark), which marks an obstruction with a least depth of 48 feet (14m6) over it, lies close SW of Route 81, 20 miles WNW of Mys Tarkhankut.

36-37, 42-43 *For "Novo-Alekseyevka" read "Lazurnoye"*

257

2 *For "An" read "A cable"*

3-4 *For "indicated on the chart" read "lies"*

10 *For "46°" read "45°"*

36 *After "radio beacon" insert "and radar beacon"*

258

23-26 *Replace by:*

Prohibited area.—Navigation is prohibited in an area indicated on the chart, extending 6 miles offshore within 5 miles on either side of Ak-Mechetskaya bukhta.

259

26-27 *Delete*

260

15, 18, 28, 37 *For* "Kyl'n Murun" *read* "Peschan'y"

265

44 *Add:* **Areas periodically dangerous for navigation off the South-western Coast of the Crimea.**—Nos. 708, 709, 724, 727 and 725 danger areas lie off the south-western coast of the Crimea to seaward of the recommended track to Odessa from south-eastward, but they become dangerous only periodically; *see* page 14 and Appendix V. Danger areas No. 721 and 300 are closer inshore westward of Sevastopol and are mentioned on pages 268 and 271.

266

39-55 *Replace by:*

A light is exhibited, at an elevation of 174 feet (53^m0), from a white octagonal concrete tower, 170 feet (51^m8) in height, situated close within Mys Yevpatoriyskiy. A reserve light is fitted above the platform of the light-tower. A radiobeacon transmits from the light-tower.

Prohibited area.—Navigation is prohibited in an area indicated on the charts, between 4 and 27 miles east-south-eastward of Mys Tarkhankut, extending up to 10 miles offshore.

Prohibited anchoring and fishing area.—Anchoring and fishing are prohibited in the area indicated on chart 2232 south and south-east of Mys Tarkhankut, from the shore to a distance of 15 miles.

For **bombing danger area** (No. 714) 10 miles south-westward of Mys Yevpatoriyskiy, *see* Appendix V.

Offshore buoys.—Several mooring buoys lie in a wide area about 45 miles south-westward of Mys Tarkhankut.

268

32-37 *Replace by:*

Prohibited area.—A prohibited area, indicated on the chart, extends up to 12 miles offshore between Ozero Saks koye (page 262) and Mys Konstantinovskiy (page 270), 10 miles southward of Lukull'skiy light.

Area periodically dangerous for navigation.—A danger area (No. 721) extends 30 miles offshore between Mys Lukull and Sevastopol'. For details *see* Appendix V.

270

41 *Add:* A submarine cable is laid across the north-western part of the Black Sea from the mouth of Reka Kacha to the vicinity of Nos Kaliakra (page 187).

271

14 *For* "north-westward" *read* "south-eastward"

35-36 *Replace by:*

Prohibited areas.—For prohibited area northward of Mys Konstantinovskiy, *see* page 268 and for that on the southern side of the harbour entrance, *see* page 279.

Areas periodically dangerous for navigation.—A small area (No. 300), in which anchoring is dangerous, lies 12 miles west-north-westward of Mys Khersones on the recommended routes to and from Odessa. For details of this area and a bombing danger area (No. 726) 12 miles south-south-westward of the same point, *see* page 14 and Appendix V.

272

8 *After* "radio beacon" *insert* "and radar beacon"

25-31 *Replace by:*

...are prohibited in an area, indicated on the chart, extending 12 miles westward from Mys Khersones to 3 miles south-eastward of Mys Sarych. In 1977 this area was extended 5 miles farther south-eastward.

Dumping grounds for explosives, indicated on the charts, lie 15 miles south-westward and 42 miles westward of Mys Khersones. An obstruction is charted 34 miles west-north-westward of the same point.

279

32 *Replace by:*

Prohibited areas.—Prohibited areas, indicated on the chart, extend up to 6 miles offshore between Sevastopol' and Mys Sarych and up to 20 miles southward between the vicinity of Mys Choban-Kale (page 289) and the vicinity of Mys Takil'.

Area periodically dangerous for navigation.—Danger areas (Nos. 730 and 731) lie about 40 and 10 miles offshore along the southern coast of the Crimea, but these areas become dangerous only periodically; *see* pages 284, 293, 14 and Appendix V.

280

18 *Add:* A light is exhibited from a red metal framework tower, 4 m in height, on Mys Feolent.

36 *Add:* Anchoring and fishing are prohibited in explosives dumping areas, indicated on the chart, situated 42 miles westward and 15 miles south-westward of Mys Khersones. A spoil ground lies 13 miles west-south-westward of the same point.

281

29 *For* "268" *read* "279"

34 *Add:* **Recommended Routes.**—**Traffic Separation.**—From a position 10 miles south-south-westward of Balaklava, recommended routes to and from Il'ichevsk and Odessa north-westward are indicated on the charts. A traffic separation scheme extends 21 miles eastward from the same position, passing 3 miles southward of Mys Sarych, and is also shown on the charts. This scheme is not IMO adopted; *see* page 14.

282

31-32 *Replace by:*

Prohibited areas.—For prohibited area westward of Mys Sarych, *see* page 279. Anchoring and fishing are prohibited in an area, indicated on the chart, between Mys Sarych and Mys Khersones.

39 *Add:* A pipeline is laid about $1\frac{1}{2}$ miles south-south-eastward from the shore $1\frac{1}{2}$ miles eastward of Mys Sarych.

Three light-buoys (S cardinal) are moored within one mile of the shore between 4 miles and 5 miles eastward of Mys Sarych.

55 *Add:* In 1976 a mooring buoy was laid 13 miles south-south-westward of Mys Kikenez.

283

39-56 *Replace by:*

Recommended Routes.—**Traffic Separation.**—From a position about 4 miles south-eastward of Mys Kikenez, the traffic separation scheme mentioned on

page 281 extends 21 miles westward, and recommended routes lead north-eastward towards Yalta and eastward to and from Novorossiysk. All are indicated on the chart.

284

2-4 *Delete*

40 *Add:* Light-buoys (E cardinal) are moored close offshore $1\frac{1}{2}$ miles and $1\frac{1}{2}$ miles north-north-eastward of Mys Aytodor

In 1978 a scientific research area was established 17 miles south-eastward of Mys Aytodor. A good look-out should be kept for buoys, fitted with radar reflectors, marking suspended instruments in this vicinity.

50 *Add:* An underwater sewer extends about 3 miles south-eastward from a point on the coast $1\frac{1}{2}$ miles east-north-eastward of the light-structure on Novvy mol (page 285); a buoy marks the extremity of the sewer pipeline.

53-55 *Replace by:*

Anchorage can be obtained in depths of from 50 feet to 66 feet (15 m to 20 m), 4 cables eastward of Yaltinskiy port.

285

2-6 *Replace by:*

Area periodically dangerous for navigation.—A danger area (No. 730) lies at least 30 miles offshore, with its centre about 40 miles south-eastward of Mys Aytodor. *See* page 14 and Appendix V.

Prohibited areas.—A small prohibited area lies close south-westward of Mys Nikitin. Anchoring and fishing are prohibited in an adjacent area, extending about $1\frac{1}{2}$ miles offshore from 1 to $2\frac{1}{2}$ miles westward of the same point.

A small spoil ground lies $1\frac{1}{2}$ miles south-eastward of the harbour entrance.

A number of buoys and mooring buoys lie between $2\frac{1}{2}$ miles east-south-eastward and 4 miles south-eastward of the entrance. Navigation in this area is prohibited.

Directions.—The recommended approach course to Yaltinskiy port from S and E are indicated on the chart.

15-19 *Replace by:*

Anchorage area No. 393 for large non-degaussed vessels lies 6 cables south-eastward of Mys Ionna, with depths of 26 m to 45 m, mud and sand.

An appreciable current has been experienced in the roadstead.

27-28 *Replace by:*

...easterly gales. Ships under 215 m in length, drawing less than 9 m can use the port.

The harbour is protected by East mole, which extends about 3 cables...

33-36 *Replace by:*

A light is exhibited from a floodlit white octagonal tower situated at the end of Novvy Mol.

South mole is a short angled jetty extending south-eastward from the coast north-westward of the head of East mole, leaving an entrance about three-quarters of a cable wide. A number of small piers lie close northward of South mole, providing berths for local shipping.

46 *For* "two red spherical buoys" *read* "a buoy (E cardinal)"

286

9 *Delete* "Storm signals.—"

22-23 *Delete*

26 *After* "a" *insert* "coast and port"

287

19 *Add:* Artek light is exhibited 6 cables inland 2 miles west-north-westward of Mys Ayu-Dag.

288

9 *Add:* A light is exhibited at Mys Plaka.

37 *Add:* Alushta light is exhibited about a quarter of a mile westward of Alushinskiy light.

289

21 *Add:* Rybachiy light is exhibited, at an elevation of 426 feet (129^m8) from a white round stone tower, 68 feet (20^m7) in height, situated about 1½ miles north-eastward of Mys Sotera.

23 *For* "1¼" *read* "2½"

42 *Add:* A submarine cable is laid about 5 miles southward from a position close eastward of Mys Chiken and thence eastward and north-eastward to pass about 4 miles off Mys Meganom (*see* below) and Mys Kiik-Atlama (page 291). Anchoring and fishing are prohibited within a quarter of a mile of the cable, which is laid in one of the prohibited areas mentioned on page 279.

52-54 *Delete*

290

4 *For* "lead" *read* "land"

291

3 *Add:* **Prohibited area.**—*See* page 279.

45-51 *Delete*

293

43-49 *Replace by:*

Prohibited area.—*See* page 279. A red and white conical light-buoy, whose position is approximate, lies about 15 miles south-south-westward of Mys Chauda, near the southern limit of this area.

Area periodically dangerous for navigation.—A danger area (No. 83) extends about 25 miles southward from the southern side of the above-mentioned prohibited area. *See* page 14 and Appendix V.

296

19-23 *Delete*

33-36 *Replace by:*

Prohibited area.—*See* page 279.

Dumping grounds.—Dumping grounds for explosives, indicated on the charts, lie about 20 miles offshore south-south-westward and southward of Mys Opuk. Anchoring and fishing in these areas are prohibited.

297

1 and subsequent chart references in Ch. VIII *Add:* 2242

8 *Replace by:*

...least depth of 27 feet (8·3 m) in 1987.

24 *Add:* **Pollution of the sea.**—Due to the non-tidal nature of these waters, national authorities are extremely rigorous in the application of anti-pollution regulations. *See* page 15.

32-34 *Delete* "A" to "chart."

44-45 *Replace by:*

Anchoring and fishing are prohibited in the two charted areas in the northern part of the strait, described on page 310.

298

2-3 *Delete*

4-8 *Delete*

299

26-27 *Replace by:*

Pilots are embarked at the southern end of the channel about 6 miles northward of Mys Takil' at Nos. 1 and 2 light-buoys ($45^{\circ} 12' N.$, $36^{\circ} 28' E.$) (page 304), and at the northern end...

29 *Add:* It is reported (1982) that passage of the strait is not permitted for foreign vessels at night.

31 *Add:*

Vessel Traffic Management System.—Port Radio station.—A vessel traffic management system for Kerchenskiy proliv came into operation in 1979. Traffic is at present controlled from the Kerch' Marine Superintendent's office, until a new headquarters is completed on Mys Zmeinyy (page 308). There are radar control stations at Mys Zmeinyy and on Kosa Chushka (page 310).

All vessels in the area must keep constant VHF R/T watch on channel 16 (or as otherwise ordered), or on 500 kHz if not so equipped.

There is also a Port Radio station at Kerch'.

32-54 *Replace by:*

Regulations for navigation of Kerchenskiy Proliv.—The following instructions are extracts from the Regulation of the Port of Kerch' (1978 edition).

Notice of ETA. The exact time of arrival at the pilot station at No. 1 buoy should be signalled 6 hours beforehand.

No vessel may enter the area controlled by the traffic management system without permission. This permission is in force for 30 mins., after which permission must be requested again.

The passage draught allowed for the navigation of Kerchenskiy Proliv will be promulgated by the Harbour Master's office at Kerch'.

Speed limitations:

Vessels with draught of less than 5 m—11kn.

Other vessels —9 kn.

except between the meridians $36^{\circ} 35' \cdot 0E.$ and $36^{\circ} 37' \cdot 5E.$ where the speed of ships must not exceed 6 kn.

Vessels with a draught of 7.5 m and above must carry lights and shapes as prescribed by Rule 28 of the International Rules for Preventing Collisions at Sea (1972).

During fog, haze and falling snow navigation in the channel is prohibited except when carried out with the permission of the traffic management system.

Vessels leaving lateral channels to join the main channel, and leaving the main channel to join lateral channels, must give way to vessels proceeding along the main channel.

Overtaking of ships in the canal is permitted.

Right of way at canal turns;

Vessels with a draught of less than 7.5 m give way to other vessels.

If both vessels have draught of 7.5 m or more, the vessel making a turn to port has right of way.

Vessels giving way must remain 5 cables from the turn until the other vessel is clear.

300

2-40 *Delete*

301

4-8 *Delete*

11-13 *Replace by:*

...Kyz-Aul. It is marked by a buoy (spar; S cardinal).

15-16 *Replace by:*

...3 miles south-eastward of Mys Kyz-Aul. A light-buoy (spar; S cardinal) is moored about 5 cables south-south-eastward.

26 *Delete* "at" to "(95^m4)"

32-34 *Replace by:*

...a light-buoy (spar; E cardinal): buoys (spar; E cardinal) mark the north-eastern and south-eastern...

41-44 *Delete*

302

6 *After* "pyramid" *insert* "with two black daymarks"

11-15 *Replace by:*

...Rog; its south-western edge is steep-to. A buoy (spar; S cardinal) marks the southern extremity of Rif Kishla.

22-23 *Replace by:*

...side is marked by a light-buoy (spar; S cardinal).

26 *Add:* Banka Savenko lies in the north-eastern part of a rectangular spoil ground, indicated on the chart.

31 *Add:* A dangerous wreck lies close south-eastward of Banka Aksenova and is marked by a light-buoy (spar; S cardinal).

303

20-21 *Replace by:*

...on its north-western side by a buoy (spar; W cardinal). A detached rock, with a...

37-38 *Replace by:*

...extremity and is marked by a buoy (spar; W cardinal). A 6-foot (1^m8) obstruction is...

304

2-7 *Replace by:*

No. 1 light-buoy (spar; W cardinal) and No. 2 light-buoy (spar; port hand) are moored on the eastern and western sides, respectively, of the entrance to Kerch'-Yenikal'skiy kanal, 3 miles south-eastward of Mys Kamysh-Burnu.

34 *Add:* A conspicuous white square obelisk, surmounted by a spire, 6 m in height, stands one mile north-westward of Mys Pavlovskiy.

37-42 *Replace by:*

...eastern extremity is marked by a buoy (spar; E cardinal) moored 8½ cables east-south-eastward of the latter.

44-50 *Replace by:*

...rif. The first group is marked by a buoy (spar; E cardinal) moored 3½ cables east-north-eastward of Mys Pavlovskiy; the second group by a buoy (spar; E cardinal) moored 4 cables eastward of Mys Belyy; and the third group by a buoy (spar; W cardinal) moored 5 cables east-south-eastward of Mys Belyy. There is a channel between the second and...

2-5 *Replace by:*

...are decreasing yearly.

9-14 *Replace by:*

| ...to a width of about half a mile. *No. 19* light-buoy (spar; N cardinal) marks the north-western extremity of this flat.

A buoy (isolated danger) marks an obstruction one mile northward of the extremity of Kosa Tuzla.

25-31 *Delete*

37-49 *Replace by:*

Spoil ground.—A disused spoil ground, shown on the chart, lies off Kosa Tuzla.

51-52 *Replace by:*

| ...is permitted in area No. 450, indicated on the chart, $5\frac{1}{2}$ miles northward of Mys Takil light and in area No. 451 designated for large vessels and those with dangerous cargoes $5\frac{1}{2}$ miles north-eastward of the light.

54-55 *Replace by:*

...**KANAL FROM SOUTHWARD.**—**Traffic Separation.**—The recommended routes and traffic separation scheme between Kerchenskiy proliv and a position about 50 miles southward, connecting with the recommended routes between Odessa and Novorossiysk, are indicated on the charts. This scheme is IMO adopted. *See* page 14.

The southern end of the traffic separation scheme is marked by a light-buoy (spar; S cardinal) moored 17 miles southward of Mys Takil'. The inner end is marked by a light-buoy (spar; N cardinal) lying 2 miles east-north-eastward of the same point. Thence the combined track continues on a course of 329° for $2\frac{1}{2}$ miles to a light-buoy (spar; safe water) which lies on the alignment of Pavlovskiy leading lights (see below).

Pilots for Kerch'-Yenikal'skiy kanal are embarked 3 miles farther northward off No. 1 light-buoy (page 304).

For **bombing danger area** (No. 736), 5 miles eastward of this traffic separation scheme, *see* Appendix V.

2-16 *Delete*

20-37 *Replace by:*

...from south to north.

| In 1987 the dredged depths were 8·2 m in Pavlovskoye reach, 8·3 m in Burunskoye reach, 8·4 m in Yenikal'skoye reach and 8·3 m in Chushkinskoye reach, and the width 120 m. *See* page 299 for the range of water level.

The channel is marked by spar light-buoys and buoys in accordance with the IALA system, numbered consecutively from the southern entrance.

39 *For "2" read "3"*

41-42 *Replace by:*

... $4\frac{1}{2}$ miles.

| The southern entrance is between Nos. 1 and 2 light-buoys (page 304): thereafter the reach is marked by starboard and port hand light-buoys and buoys as far as No. 10 buoy. *No. 9* light-buoy (pillar; W cardinal), moored 2 miles southward of Nizhniy Pavlovskiy light, marks an obstruction on the eastern side of the channel. *No. 12* light-buoy (preferred channel to starboard), moored $1\frac{1}{4}$ miles southward of the same light on the western side of the channel, marks the turn into Burunskoye koleno.

45-46 *Delete "from" to "height"*

48-49 *Delete "from" to "height"*

50 *Add:* *White fixed lights* are exhibited by day from these leading light beacons.

307

5-13 *Delete*

24-35 *Replace by:*

This reach is also marked by starboard and port hand light-buoys and buoys except for No. 13 light-buoy (spar; W cardinal) and No. 19 light-buoy (page 305), both of which mark shoal water south-eastward of the channel. Two light-beacons are situated respectively, about $1\frac{1}{4}$ cables North...

37 *For* "356°" *read* "355°"

51-55 *Delete* "The northern" to "basin".

308

35 *For* "or South Transhipment road" *read* "(Anchorage No. 452)"

39-42 *Delete*

44 *For* "Tuzlinskiy light-buoy No. 15" *read* "No. 19 light-buoy"

309

2-3 *Replace by:*

...its south-western side is marked by a buoy (spar; S cardinal)

7-8 *Delete* "of the dredged channel"

9-12, 31-39 *Delete*

22 *Add:* Anchoring and fishing are prohibited in an area one mile wide, indicated on chart 2216, between Mys Yenikale and the south-western end of Kosa Chushka. A number of dolphins, wrecks, and obstructions lie in this area, clear of the dredged channel passing through it.

30 *Add:* A secondary radiobeacon also operates for use in the northern approaches to the strait. *See* page 342 and *Admiralty List of Radio Signals*, Vol. 2.

31-35 *Delete*

310

21-23 *Delete* "No. 7" to "page 312."

34-37 *Replace by:*

Varzovskiy light-buoy (spar; safe water) is moored about 4 miles north-eastward of Mys Varzovka. A light-buoy (pillar; special) is moored $1\frac{1}{4}$ miles northward of the same point.

44-55 *Replace by:*

Prohibited anchorages.—Anchoring and fishing are prohibited in an area, indicated on the chart, extending east-north-eastward across the northern part of the strait from Mys Fonar to the northern part of Kosa Chushka. An obstruction lies in this area, $2\frac{1}{4}$ miles south-westward of Mys Akhilleon light (page 309). Another prohibited anchoring and fishing area extends south-eastward across the strait from Mys Yenikale to the south-western end of Kosa Chushka.

311

10, 33 *For* "Akhilleonskiy" *read* "Tamanskiy"

21-22 *Replace by:*

...125 m, from a metal framework tower with a black rectangular daymark with a central red stripe, 31 m in height, situated about 5 miles west-south-westward of the...

31 *Replace by:*

White fixed lights are exhibited by day from...

34-35 *Delete* "exhibited" to "height"

37-38 *Delete* "exhibited" to "height"

41 *For* "Tuzlinskiy light-buoy No. 15" *read* "No. 19 light-buoy"

43-56 *Replace by:*

Thereafter the channel is marked by light-buoys and buoys (spar; starboard and port hand) as far as No. 41 light-buoy (spar; N cardinal), moored 2 miles north-north-eastward of Peredny Chushkinskiy light (page 312). This light-buoy marks the junction with Chushkinskoye koleno.

312

2-18 *Delete*

19, 22 *For* "beacons" *read* "light-beacons"

20 *For* "344°" *read* "343°"

27-40 *Replace by:*

...to the strait.

The channel is marked by light-buoys and buoys (spar; starboard and port hand) as far as No. 51 light-buoy (spar; W cardinal) at the northern entrance to the strait, moored 3 miles eastward of Mys Varzovka (page 310).

52 *For* "Nos. 5 and 6 light-buoys (*see above*)" *read* "Nos. 41 and 42 light-buoys"

313

18-19 *For* "No. 21 light-and-siren buoy" *read* "at the southern entrance to the channel"

28 *For* "306" *read* "307"

31 *Replace by:*

...bearing 247°, passing north-westward of No. 19 light-buoy,...

48 *Delete* "and-whistle."

315

28-38, 56 *Delete*

316

2-3 *Delete*

317

54-55 *Delete*

318

2-14 *Delete*

319

4-17 *Delete*

320

39 *Add:*

Pollution of the sea.—Due to the non-tidal nature of these waters, national authorities are extremely rigorous in the application of anti-pollution regulations. *See* page 15.

321

9-32 *Replace by:*

For details of a **bombing danger area** (No. 760) in the western part of the Sea of Azov, *see* Appendix V.

Charts 2216, 2234

DIRECTIONS.—Kerch'-Yenikal'skiy kanal to Taganrogskiy zaliv.—From Varzovskiy light-buoy (page 310) in the northern approaches to Kerch-Yenikal'skiy kanal, the recommended track leads about 63 miles northward to

No. 3 light-buoy (page 334) moored $7\frac{1}{2}$ miles southward of Berdyanskaya Kosa light-structure (page 331), and thence north-eastward for 35 miles to the light-buoys marking the entrance to Port Zhdanov approach channel (page 349). North-bound vessels keep about 2 miles eastward, and south-bound vessels about 2 miles westward, of this centre line for the greater part of its length, but keep close to it when within about 30 miles of Port Zhdanov.

Traffic separation schemes are established at the ends of the 63-mile north/south recommended tracks; *see* pages 342 and 334.

See chart 2234 for details.

Light-buoys.—The centre line separating the above-mentioned tracks is marked by No. 1 light-buoy at the northern end of the traffic separation scheme described on page 342, by No. 2, light-buoy (pillar; safe water) (page 234)

55 *Replace by:* A submerged drilling platform lies 11 miles northward of Mys Tarkhan and should be given a wide berth.

322

2-5 *Delete*

24 *Add:* A light is exhibited from a metal framework structure with black sides, 13 m in height, situated $1\frac{1}{2}$ cables south-south-westward of the point

42 *Add:* **Prohibited area.**—an area, indicated on the chart, in which navigation is prohibited extends about 6 miles offshore between Mys Tarkhan and Mys Chagany. A light stands on Mys Chagany.

326

17-18 *Replace by:*

...which extremity is marked by a buoy (spar; W cardinal). There are several other patches, with...

51-53 *Delete*

55-56 *Delete* "in accordance" to "pages 22-24"

329

50-53 *Delete* "The south-eastern" to "'09' E)."

330

26 *Replace by:*

Charts 2217, 2234

331

1 *Replace by:*

Charts 2217, 2234

18-24 *Read:* The southern extremity of this bank is marked by *Berdyanskiy* light-buoy (pillar; S cardinal); the south-western extremity by a buoy (spar; W cardinal).

29 *Replace by:*

A radio and radar beacon transmit from this Lighthouse.

30-32 *Replace by:*

Three radar reflectors are situated round the south-western extremity of *Berdyanskaya kosa*, within 5 cables of the lighthouse.

Berdyanskiy Verkhniy light is exhibited from an eight-sided stone tower, painted red and white in bands, 33 m in height, situated about 8 miles north-...

1 *Replace by:*
Charts 2217, 2234

5-6 *Replace by:*
...are exhibited.

11 *Add: Area periodically prohibited to navigation.*—An area (No. 154) which is periodically dangerous to navigation lies 5 miles westward of Berdyansk; see page 14.

13-22 *Replace by:*
...80 m and depths of 7·8 m (1984) has been dredged from a position 9 miles westward of Berdyanskiy Nizhniy lighthouse ($46^{\circ} 38' N.$, $36^{\circ} 45' E.$) to Berdyanskiy port about 11 miles north-eastward. The channel is entered between No. 1 light-buoy (starboard hand) and No. 2 light-buoy (port hand); thereafter it is marked by light-buoys and buoys (IALA system). Light-buoys from No. 17 ($46^{\circ} 40' N.$, $36^{\circ} 40' E.$) inwards are fitted with bell or whistle fog signals.

29 *For "north-westward" read "North-eastward"*

37 *For "No. 12 buoy" read "No. 1 light-buoy"*

38-40 *Replace by:*

Directions. Recommended routes Nos. 55 and 56, which are shown on the chart, lead NW from the traffic roundabout centred 8 miles SSE of Berdyanskaya Kosa, to the dredged approach channel.

Route No. 56 is for the use of vessels with a draught of less than 6 m.

Chart 2217

44-51 *Replace by:*

...westward by a mole which extends about 3 cables south-westward and southward from the shore abreast the north-western end of the breakwater. A quay about 2 cables long extends south-eastward along the shore from the inner end of the mole. The area eastward of the mole is known as East basin; that westward of the mole as West basin.

56 *Delete*

2-8 *Replace by:*

Berths Nos. 1 to 5 are on the quay and on the eastern side of the mole, No. 6 is at the head of the mole and Nos. 7, 8 and 9 on its western side. In 1983 depths on the eastern side of the mole varied from 4·5 m to 6·7 m.

36-37 *Replace by:*

Port facilities.—**Storm signals.**—A limited supply of oil fuel is available.

42 *Replace by:*

...patent slip in the port. Tugs are available.

47-48 *Replace by:*

Port radio station.—There is a port radio station at Berdyansk.

1 *Replaced by:*
Chart 2217

12 *Replace by:*
Chart 2234

NORTHERN SHORE OF SEA OF AZOV (contd. from page 330).—**Traffic Separation Scheme.**—The north-western corner of a traffic separation scheme, which is not IMO adopted, lies on the recommended routes between Kerch'-Yenikal'skiy kanal and Taganrogskiy zaliv (page 321), and is situated about $7\frac{1}{2}$ miles south-south-eastward of the extremity of Berdyanskaya kosa.

This position, which is the centre of a roundabout, is marked by No. 3 light-buoy (pillar; special). A traffic separation zone, $2\frac{1}{2}$ miles wide, extends 8 miles southward from the roundabout to No. 2 light-buoy (pillar; S cardinal).

The scheme also extends 20 miles in a 050° direction on either side of a separation centre line and then continues as a recommended track to Taganrogskiy zaliv. The centre line of the north-eastern leg of the scheme is marked by Nos. 4, 5 and 6 light-buoys (pillar; safe water) moored at 7-mile intervals. Shoal patches, with depths of between 7 and 8 m over them, lie near this part of the route, 14 miles eastward and 21 miles north-eastward of the extremity of Berdyanskaya kosa; they are marked by a light-buoy (pillar; isolated danger) and a light-buoy (pillar; N cardinal) respectively. Buoyed wrecks about 2 miles north-eastward of the latter position are described on page 346.

The recommended route from the north-western corner of this traffic separation scheme to Berdyansk is described on page 332.

18-21 *Delete*

31 *Add:* A light is exhibited at Petrovskoye, 13 miles north-north-eastward of Berdyanskiy Nizhniy light.

51 *Add...* and a fog signal is sounded.

53 *Add:* For **firing danger area** (No. 761) in Belosarayskiy zaliv, *see* Appendix V.

335

52-54 *Replace by:*

...of Temryuiski light-structure and about 2 miles offshore. A light-buoy (pillar; N cardinal) marks the northern extremity of the shoal.

338

54 *Replace by:*

Banka Zhelezinskaya (Zhelyezin), a patch with a least depth of 16 feet (4·8 m), lies about 23½ miles WSW of the S extremity of Kosa Kamyshevataya.

339

2-14 *Delete*

7-9 *Replace by:*

A light-buoy (pillar; W cardinal) is moored 1½ cables westward of the northern end...

21-24 *Delete* "The eastern" to "light-structure."

52-54 *Delete* "The northern" to "point up."

340

15 *Delete* "in accordance" to "page 22"

341

9 *Delete* "in accordance" to "page 22"

49-51 *Replace by:*

Kamyshevatskiy light is exhibited from a white concrete tower with a white daymark with a red band, 15 m in height, situated about 3½ miles north-westward of...

342

26-35 *Replace by:*

A light-buoy (pillar; W cardinal) is moored near the extremity of the 18 foot (5^m5) coastal bank off Kosa Yelenina about 16½ miles west-south-westward of Dolzhanskaya church.

An unmarked foul patch and a dangerous wreck lie 29 miles west-south-westward of the above church.

48 *Add:*

Traffic Separation scheme.—A traffic separation scheme, not IMO adopted (*see* page 14), is established between 2½ and 12½ miles northward of Varzovskiy

light-buoy (page 310) in the northern approaches to the strait. The separation zone is $2\frac{1}{2}$ miles wide and its northern end is marked by *No. 1* light-buoy (pillar; N cardinal). For recommended track from northward *see* page 321. An oil platform is under construction (1988) in the central part of the Traffic Separation Scheme, 3 miles S of *No. 1* light-buoy.

The *white* sector of Tamanskiy front leading light (page 311), bearing between $180\frac{1}{2}^{\circ}$ and $187\frac{1}{2}^{\circ}$, leads through the eastern (north-bound) lane of the scheme.

50 *Delete* "and-whistle-"

52 *For* "1 and 2" *read* "51 and 52"

343

8 *For* "1 and 2" *read* "51 and 52"

11 *Add*:

Anchorage.—Anchorage area *No. 453* lies 3 miles northward of *Mys Varzovka* (page 310): anchorage area *No. 454* lies $5\frac{1}{4}$ miles north-eastward of the same point.

345

20 *For* "2293" *read* "2217"

29-33 *Replace by*:

The southern extremity of this bank is marked by a buoy (spar; S cardinal). A light-buoy (pillar; W cardinal) is moored $2\frac{1}{2}$ miles south-westward of Belosarskiy lighthouse.

No. 7 light-buoy (pillar; safe water) is moored about 4 miles southward of the same lighthouse, on the recommended approach route to Port Zhdanov.

52-55 *Replace by*:

A light is exhibited from a black metal framework tower, 14 m in height, situated on *Dolgaya kosa*, 4 miles north-westward of *Dolzanskaya* church.

346

2-4 *Delete*

8-13 *Replace by*:

...and shell which alter in size and shape from year to year. A light-buoy (pillar; W cardinal) is moored 11 miles north-westward of *Dolgaya kosa* light, marking the extremity of shoal water off the spit.

A light-buoy (pillar; safe water) is moored 13 miles north-north-westward of *Dolgaya kosa* light.

19 *Delete* "within" to "buoys,"

20-26 *Delete* "A vessel" to "page 364."

347

1 *For* "2293" *read* "2217"

15 *Add*: A conspicuous white square stone obelisk with a spire stands close south-westward of Zhdanov port (*see* below). A coast radar station stands 8 cables farther south-westward. A conspicuous television mast stands about $1\frac{1}{2}$ miles north-north-eastward of the port.

23 *Add*:

Directions.—*See* page 364.

Chart 2217

42-45 *Replace by*:

Anchorage.—Anchorage areas *Nos. 457* and *458* lie eastward of the approach channel to Port Zhdanov Coal harbour (page 349) about 7 miles and 4 miles, respectively, southward of the entrance to the port.

49-50 *Replace by*:

...best be seen on the chart.

348

1 For "2293" read "2217"

12-17 Replace by:

In 1987 the general depth in the Coal harbour was 8·5 m, with depths of 7 to 8 m alongside the quay.

A light is exhibited on the head of Zapodnyy mol.

32 For "1967" read "1980"

33 For "13 to 20 feet (4^m0 to 6^m1)" read "6 m to 9 m"

50-51 Replace by:

...of the basin is a wharf, 241 m long. In 1987 the general depth in the basin was 8·5 m, with 6 m to 9 m alongside.

349

1 For "2293" read "2217"

5-6 Replace by:

A light-buoy (pillar; N cardinal) is moored on the eastern side...

15 Replace by:

...two small piers in the basin. In 1987, there were depths of 6·1 m to 9·9 m...

20 For "8½" read "9½"

21 For "1968" read "1987"

22-32 Replace by:

...of 8·2 m over a width of 100 m. See view [32].

The channel is entered between No. 1 light-and-whistle-buoy (starboard hand) and No. 2 light-and-bell-buoy (port hand) moored about 5 miles east-north-eastward of Belosarayskiy light-house. Thereafter it is marked by light-buoys and buoys (starboard and port hand).

33 For "7" read "7¼"

35-38 Replace by:

...on its north-western side by a light-buoy (preferred channel to port): thereafter it is marked by light-buoys and buoys (starboard and port hand). It is 100 m wide and in 1987 had a dredged depth of 5·3 m. The axis of this...

350

1 For "2293" read "2217"

12-13 Replace by:

Melekino Yuzhnyy leading lights in line bearing 305° are situated at...

18-21 Replace by:

...structure. They are exhibited in winter only and indicate a vessel's position in the approach channel when buoyage has been withdrawn.

22-23 Delete "for" to "channel"

30-33 Replace by:

...lights bear 280° and also indicate a vessel's position in the channel when buoyage has been withdrawn.

40 For "293° 18'" read "293½°"

43 Add: The lights are exhibited in winter only.

53 For "A red light" read "Three red lights"

351

1 For "2293" read "2217"

5-9 Replace by:

...in 1967 it had been dredged to a depth of 4 m. A light-buoy (pillar; safe water) is moored at the southern end of the channel, 12 miles north-eastward of Belosarayskiy lighthouse.

24 After "cables." insert: A light-buoy (pillar; W cardinal) is moored close westward of the southern breakwater head.

36-38 *Replace by:*

| ...Reka Kal'mius. The dredged depth in the basin was 3·5 m in 1987. There is an oiling berth at the north-western corner of this basin, and other berths lie along a quay at the northern end of its eastern side.

42-55 *Replace by:*

Approach channels.—Navigational aids.—The recommended approach track leading to Gavan' Schmidta from south-eastward, through the bar off the entrance to Reka Kal'mius, is on the $338\frac{1}{2}^{\circ}$ leading line described on page 352. Beyond the junction of this track with a dredged channel leading from south-westward (*see below*), the channel was dredged to 3·4 m in 1986 over a width of 70 m.

No. 18 light-buoy (port hand) is moored on the north...

352

1 *For "2293" read "2217"*

4 *Delete "channel"*

12 *For "through the approach channel" read "on the recommended track"*

19 *Replace by:*

...wide, and in 1981 was dredged to a depth of 5·7 m

20-22 *Replace by:*

This channel is marked by light-buoys and buoys (starboard and port hand).

36 *For "38° 28' E." read "37° 28' E."*

39 *For "In 1966 there was" read "There is"*

40 *Add: See page 347*

353

1 *For "2293" read "2217"*

22-24 *Delete*

46 *Replace by:*

Radio stations.—There is a coast and a port radio station at Zhdanov; the latter also provides a radar control service, mentioned on page 352.

354

32-34 *Replace by:*

...less. A buoy (pillar; S cardinal) marks the southern side of the bank.

37 *Replace by:*

...a buoy (spar; isolated danger).

357

7 *Add: For firing danger area (No. 763) northward of this coast, see Appendix V.*

359

25 *Delete "Radio station.—"*

361

28-30 *Delete*

53-55 *Replace by:*

Krivaya Kosa light-buoy (safe water) is moored about 10 miles SW of Krivaya Kosa Light.

362

2-3 *Delete*

363

32-34 *Delete*50 *Add*: There is a Coast radio station at Taganrog.

364

3-13 *Replace by*:

...scribed on page 321 at the north-eastern end of the traffic separation scheme across the Sea of Azov, marked by a black and white light-buoy about 19 miles east-north-eastward of Berdyanskaya Kosa light, a vessel bound for Zhdanov should steer 050° for 13·2 miles to No. 1 light-and-whistle buoy (page 349) marking the entrance to the dredged channel 5 miles east-north-eastward of Belosarayskiy light-structure. When the leading light-structures for the approach channel to Coal harbour are sighted, they should be brought into line bearing 012½°.

If bound for Taganrog, from a position about 5 miles eastward of Belosarayskiy light-structure, a vessel should follow...

32-32 *Delete* "and" to "day"

374

6 *Add*:

Pollution of the sea.—Due to the non-tidal nature of these waters, national authorities are extremely rigorous in the application of anti-pollution regulations. See page 15.

19 *Add*: Yantarnyy Light stands 6 miles E of Mys Zheleznyy-Rog.41-44 *Replace by*:

...of Mys Zheleznyy-Rog and 1½ miles offshore. Kubanskiy light is exhibited on the shore E of this bank, 14 miles ESE of Mys Zheleznyy-Rog. A light-buoy (N cardinal) marks the N head and a light-buoy (S cardinal) is laid close S of the S head. Mys Zheleznyy-Rog in line with Mys Panagiya (page 303) leads S of this shoal.

A wreck covered by 2 feet (0·6 m) of water lies 2 cables offshore 1½ miles W of Kubanskiy light: it is marked by a light-buoy (S cardinal).

375

26 *Add*: A radiobeacon transmits from the light-structure.33-36 *Replace by*:

The western edge of this flat is marked by a buoy (spar; W cardinal).

41-43 *Delete*

377

5-7 *Replace by*:

Utrish light is exhibited from a white round tower, 17 m in height, on the western extremity of Ostrov Utrish. A reserve light operates from the former lighthouse, a white hexagonal tower, 6 m in height, situated close to the new structure. See Appendix III.

16 *Add*: A light-beacon stands on Mys Utrishenok.22-24 *Replace by*:

A light-buoy (pillar; W cardinal) marks the edge of the coastal bank one mile south-westward of Mys Utrishenok.

Anchoring and fishing are prohibited in explosives dumping areas, indicated on chart 2216, about 27 miles westward and west-south-westward of Mys Utrish.

41-43 *Replace by*:

Anchorage may be obtained in areas 408 and 410, the positions of which are indicated on the chart. These anchorages are sheltered from...

41-48 *Replace by:*

Anchorage may be obtained in Areas Nos. 408 and 410, the limits of which are shown on the chart. Anchoring and fishing are prohibited in a small area between a position half-a-mile south-westward of Ozereika light and the shore northward.

52 *Add:* Anchoring and fishing are prohibited in a disused explosives dumping area, indicated on the chart, 8 miles southward of Mys Myskhako.

378

34 *Replace by:*

Recommended Routes from the west to Novorossiyskaya bukhta terminate in a precautionary area leading to a traffic separation scheme $3\frac{1}{2}$ miles west-south-west of Doobskiy light, ($44^{\circ} 37' N$, $37^{\circ} 54' E$.) as shown on the chart. The scheme is not IMO adopted, *see* page 14. For directions for entering and leaving Novorossiyskaya bukhta *see* pages 382 and 383 respectively.

A light-buoy (special mark) without navigational significance, lies 5 miles southward of Mys Doob. In 1982 a metal framework structure was reported in the same vicinity.

Chart 2235

Area periodically dangerous for navigation. A danger area (No. 738) lies well southward of the traffic separation scheme, with its centre about 50 miles south-westward of the entrance to Novorossiyskaya bukhta. *See* page 14 and Appendix V.

51 *Add:* A submarine pipeline extends half a mile southward from the coast 8 cables west-south-westward of Ostrov Sudzhuk. A red mooring buoy lies close northward of its head.

55 *Add:* The eastern extremity of Sudzhukskiy rif is marked by a buoy (pillar; E cardinal) moored 9 cables east-south-eastward of Ostrov Sudzhuk.

379

10-11 *Replace by:*

A red mooring buoy is moored $4\frac{1}{2}$ cables south-westward of Doobskiy Light.

15-18 *Replace by:*

...charts, extending $7\frac{1}{2}$ miles westward from Mys Doob to Mys Myskhako.

Cables.—Two submarine cables are laid from a position $1\frac{1}{2}$ miles eastward of Mys Myskhako south-eastward through the above area to Bukhta Gelendzhikskaya (page 385) and Port Tuapse (page 393).

Chart 162

An underwater pipeline extends $1\frac{1}{2}$ cables south-westward from a position close southward of Doobskiy light.

31 *Add:* Nos. 1, 2 and 3 buoys (spar; E cardinal) moored $1\frac{1}{2}$, one and three quarters of a mile, respectively, south-south-eastward of Mys Lyubvi light mark the edge of the coastal bank on the western side of the bay; No. 4 buoy (spar; E cardinal) moored $6\frac{1}{2}$ cables north-north-eastward of the same light marks the edge of the coastal bank northward of the light.

33 *For* "eastern limit" *read* "south-eastern extremity"

34-38 *Replace by:*

...light-buoy (pillar; special) and the north-eastern extremity by a similar light-buoy.

Two fish-factory piers extend from the shore 9 cables southward of Mys Lyubvi; lights are exhibited from their heads.

50-51 *Delete* "A" to "jetty".

380

11-15 *Replace by:*

...by a light-buoy (starboard hand) moored 12 cables east-south-eastward of Sudzhukskiy light-structure.

A 21 foot (6^m4) patch, marked on its northern side by a buoy (spar; isolated danger), lies on the northern part of...

18 *Replace by:*

...of the 21 foot patch: it is marked on its northern side by a light-buoy (pillar; N cardinal).

24-25 *Replace by:*

A light-buoy (pillar; E cardinal) is moored one mile southward of...

53 *After "tower" insert " , 13 m in height"*

56 *Add:* The gap between Sudzhukskiy rif and Penayskiye banki through which the western leading line passes is marked by light-buoys (port and starboard hand).

381

11 *For "43 feet (13^m1)" read "24 m"*

12 *For "white round metal tower, 35 feet (10^m7)" read "red and white round concrete tower, with a red vertical stripe, 21 m"*

28-48 *Replace by:*

...is contained between two oiling jetties extending 3½ cables westward from the quay forming the eastern side of the harbour. The southern jetty has been extended 3 cables in a south-south-westward direction by a narrow mole, from each end of which a light is exhibited.

Lights are exhibited from the heads of the jetties and from the inner end of the northern one. Anchoring and fishing are prohibited in a charted area about 5 cables southward of Gavan' Sheskharis.

A buoy (spar; special) is moored 1½ cables southward of the head of the southern jetty.

There are depths of up to 14·5 m alongside the oil jetties. The maximum permitted entry draught is 13·5 m. There are eight tanker berths at Gavan' Sheskharis, capable of accommodating vessels of up to 60 000 tons alongside, except for No. 1 berth which can accommodate tankers of up to 250 000 tons, with a draught of 19 m.

Two submarine pipelines extend 3 cables south-westward from the coast about half a mile south-westward of Gavan' Sheskharis. A light-buoy (pillar; S cardinal) marks the end of the northern pipeline. A conspicuous white monument stands near the root of the southern pipeline.

52 *Add: Chart 2245*

During north-east storm winds at Port Novorossiysk vessels, except tankers or those carrying explosives, should anchor south-westward or south-eastward of Yuzhnaya Ozereika (44° 40' N., 37° 38' E.), in anchorage areas 408 or 410, whose positions are best seen on the chart.

Under the same weather conditions tankers and vessels carrying explosives should anchor in anchorage area No. 416, whose position can be seen on the chart, south-south-eastward of Mys Doob.

55-56 *Replace by:*

Anchorage area No. 412 lies south-westward of the 334½° leading line 9 cables northward of Ostrov Sudzhuk: the bottom is mud. Anchorage area No. 413 lies one mile south-eastward of the head of Vostochnyy mol. Anchorage area No. 414, which is the main anchorage for ships waiting to enter the port, lies westward of Mys Penay. Anchorage area No. 415 lies northward of Mys Doob.

382

2-7 *Delete*

12-15 *Delete*

21 *For* "1½" *read* "2"

24 *Add:* Traffic in the port and its approaches is regulated from the port control and radar station situated near the head of Vostochnyy mol. Pilots disembark from vessels leaving the port 1.3 miles south-south-east of Sudzhukskiy light.

50 *Add:* Ships wishing to cross from the Kabardinskiye leading line to the Novorossiyskiy leading line (page 380) must obtain permission from the port control station.

52-56 *Replace by:*

Directions.—A vessel approaching Novorossiyskaya bukhta from south-west is recommended to use the approach route shown on the chart passing through the precautionary area and traffic separation scheme to a pilot boarding position, situated 2 miles west of Doobskiy light.

Having embarked a pilot, a vessel proceeding to one of the anchorage areas in Novorossiyskaya bukhta should bring'...

383

2 *Delete*

9-10 *Delete* " , when" to "light-structure"

12 *For* "334½." *read* "334°"

14-20 *Replace by:*

...entrance, passing W of Penayskiye banki.

A vessel leaving Novorossiyskaya bukhta having passed the channel buoys and disembarked the pilot, (page 382) should steer south-west to pass through the traffic separation scheme and precautionary area.

Caution. The route for Hydrofoils approaching Novorossiyskaya bukhta from the west joins the recommended track south-east of Sudzhukskiy light.

28 *Add:* In 1978, the maximum permitted entry draught and length were 11 m and 250 m, respectively.

39 *Add:* A light-beacon stands nearly one cable southward of the same mole head.

47 *Replace by:*

...south-western corners, respectively, of the heads of the wharves flanking the Cold Storage basin.

53-55 *Delete* "A" to "1966."

384

5 *Add:* Shirokiy pirs (No. 2) extends 4½ cables south-south-eastward from the shore 1½ cables north-eastward of Shirokiy pirs. A Ro-Ro berth is situated between the roots of these moles.

12 *Delete* "an L-shaped pier"

17-18 *Replace by:*

In 1978 there were three floating docks between the head of the cement pier and Vostochnyy mol.

20-31 *Replace by:*

...on the north-western end of the head of the Cement pier. A light is exhibited on the south-eastern end of the head of the Import pier.

Works are in progress (1983) up to 5 cables south-eastward of Vostochnyy mol.

45 *After* "Diesel" *insert* "and fuel"

50 *For* "250" *read* "100"

385

8-12 *Replace by:*

Radio stations.—There is a coast and a port radio station at Novorossiysk, the latter providing port information and a radar control service.

33 *Add:* See page 381 for storm anchorages.

50 *Add:*

Prohibited area.—There is a small prohibited area in Bukhta Rybaikaya.

386

15-20 *Delete* “Geledzhikskiy” to “dwelling.”

24-26 *Delete*

28-32 *Replace by:*

...and extends up to 2½ cables offshore: a buoy (spar; port hand) marks its south-eastern extremity.

35-40 *Replace by:*

A buoy (spar; starboard hand) marks the western extremity of the bank. A patch, with a least depth of 10 feet (3^m0), lies...

44 *Add:* A submarine pipeline from Novorossiysk is landed close northward of Mys Tolstyy light.

A light-buoy (spar; special) is moored 3¼ miles south-westward of Mys Tolstyy.

387

3-4 *Delete* “near” to “38° 05' E.)”

12 *Delete* “**Directions.**—”

18-23 *Replace by:*

Prohibited anchorage.—Anchoring and fishing are prohibited in an area (No. 661) about 1¼ miles wide extending 4 miles south-westward from the entrance to Bukhta Gelendzhikskaya.

45 *Add:* Mezyb light is exhibited from a white round metal column, 5 m in height, situated half a mile north-westward of that river's mouth.

389

24-26 *Replace by:*

...are marked by a spar buoy. A detached 17 foot (5^m2) patch lies nearly 2 cables south...

390

50 *Add:* A light is exhibited from Mys Gryaznova.

391

20-26 *Delete*

392

4-6 *Replace by:*

...waters. Zapadnyy mol extends 2 cables south-south-eastward from a position 7¼ cables eastward of Kodoshkiy light. Piles of concrete blocks extend southward from the end of the mole to the north-western end of Yugo-Zapadnyy Volnolom.

16-17 *Replace by:*

...Yuzhnyy mol.

20-24 *Replace by:*

Two floating docks are moored in the north-western corner of the port. They are marked by red lights.

34-35 *Replace by:*

A light-buoy (pillar; W cardinal) is moored one cable west-south-westward...

45-46 *Replace by:*

...to the harbour. In 1986 the entrance channel was dredged to a depth of 11·7 m.

51-56 *Replace by:*

Quayage.—Depths.—Shirokiy mol extends south-westward from a position 4½ cables eastward of the root of Zapadnyy mol.

393

2-6 *Replace by:*

It is 600 m long. Berths Nos. 9, 10 and 11 are on its south-eastern side, No. 11A is on the head and No. 12A is on its north-western side.

10-13 *Delete*

25-27 *Delete “, and” to “southern side”*

35-36 *Replace by:*

...with the general railway system.

In 1983 the safe permissible draughts were:

Berth No. 1 12·0 m

Berth No. 2 11·2 m

Berth No. 3 9·7 m

Berth No. 4 11·5 m

Berth No. 5 12·0 m

Berth No. 6 9·7 m

38 *Add:* The pilot boards one mile southward of the entrance; the pilot boat is fitted with VHF R/T.

43 *Add:* The maximum permitted draught for entry into the port is 12 m.

44-46 *Replace by:*

Anchorage.—Anchorage is permitted in an area about 1½ miles south-south-eastward of the main entrance to the harbour. Depths are 13 m to 18 m; sand and clay. Anchorage area No. 418, 2 miles south-eastward of Mys Kodosh, is for foreign ships.

56 *Replace by:*

...conditions prevail a ship may be attended by tugs at her berth or it may be necessary to proceed to sea.

394

2-19 *Replace by:*

Directions.—A vessel approaching Port Tuapse should use either the W or S Approach route. Both approach routes are shown on the chart.

46 *Replace by:*

...displacement and there are two floating docks, of 6000 tons and 15 000 tons capacity, respectively. There is a 100-ton floating crane. Four tugs are available.

There is a hospital at Tuapse.

50 *After “a” insert “coast and port”*

395

16-18 *Delete “A bank” to “offshore.”*

20 *After “it.” insert:* A dangerous wreck marked by a buoy (spar; W cardinal) lies close offshore 9 cables south-eastward of Ushchel'ye Shuyuk.

33 *Replace by:*

...39° 21' E.) is exhibited, from a metal framework structure, 14 m in height, on the...

35-39 *Delete*

396

18-21 *Delete*

34 *Add:* A lighthouse stands on the headland.

45-46 *Delete*

397

9-11 *Replace by:*

Pilotage.—Pilotage is compulsory; pilots board one mile south-westward of Sochinskiy light.

Directions.—The recommended approach course from westward is 098° for 8.1 miles from a position $43^{\circ} 34' .8$ N., $39^{\circ} 30' .0$ E., thence 072° for 12 cables. From southward the recommended track is 357° for 6.4 miles from a position in $43^{\circ} 25' .9$ N., $39^{\circ} 43' .2$ E., thence $356\frac{3}{4}^{\circ}$ for 16 cables. The least depth in the entrance channel in 1978 was 8.8 m over a width of about 100 m.

29-38 *Read...*light. These lights in line, bearing $356\frac{3}{4}^{\circ}$, lead up to the harbour entrance.

Sochi harbour is formed by South mole, which projects $1\frac{1}{2}$ cables south-westward from a position close west-south-westward of Sochinskiy light, and North mole, an angled jetty which extends 2 cables south-westward and 2 cables southward from the coast about 4 cables north-westward of the same light. The maximum permitted entry draught and length is 8.0 m and 180 m respectively.

Lights are exhibited from the heads of North and South moles.

A submarine pipeline extends about 3 cables west-south-westward from the coast close northward of North mole.

A bank with a depth over it of 10 feet (3^m0) lies close south-south-westward of South molehead.

Anchorage.—Anchorage area No. 419 lies about half a mile south-westward of South molehead.

48 *Add:* Water is available at most alongside berths, but no fuel oil can be supplied.

53 *After "a" insert "coast and port"*

398

1 *Add:* **Area periodically dangerous for navigation.**—The north-eastern side of a danger area (No. 740) lies between 15 and 30 miles offshore between the vicinity of Sochi and Poti (page 408), 120 miles south-eastward. *See* page 14 and Appendix V.

399

8-10 *Replace by:*

Cables.—Submarine cables are laid from Adler north-westward to Tuapse and south-eastward to Sukhumi (page 404).

31 *Add:* Leselidze light is exhibited $3\frac{1}{2}$ miles east-south-eastward of Mys Konstantinovski.

400

8-10 *Replace by:*

Prohibited area.—A prohibited area lies within 6 miles north-westward of Mys Pitsunda.

20 *Add:* Gagrinskiy light is exhibited 12 miles north-north-eastward of Pitsundskiy light and close north-westward of Gagry (*see* below).

401

27 *Add:* A light is exhibited from a position about half a mile north-north-westward of Mys Tolsty.

402

8, 10 For "Sukhumiyskiy" read "Sukhumskiy"

48 Add: A light is exhibited from a structure close W of the monastery.

403

10-11, 19, 22, 23, 27, 34, 40, 41, 43, 49, 55 For "Sukhumiyskiy" read "Sukhumskiy"

13 Add: A light stands 1 mile NW of the mouth of Reka Gunista

14-16 Delete

20 Add: Chart 2235

Area periodically dangerous for navigation.—The north-eastern point of a danger area (No. 740) lies about 18 miles south-eastward of Mys Sukhumskiy; see page 14 and Appendix V.

43 Delete "fog signal is sounded and a"

45-46 Replace by:

A light is exhibited from a metal framework tower, fitted with a radar reflector, and with a white rectangular daymark with a black stripe, 20 m in height, situated close north-north-westward of Mys Kodor.

404

3, 4 For "Sukhumiyskiy" read "Sukhumskiy"

5-6 Replace by:

...in depths of 7 to 20 fathoms (12^m8 to 36^m6), 2·6 miles and 3·1 miles east-north-east of Mys Sukhumskiy, on the alignment (285°) of two light beacons situated 2 cables westward of the head of the main pier. The depths increase very rapidly a short...

9-14 Replace by:

In stormy weather with winds from the south and south-west, the anchorage becomes dangerous and vessels must remain at constant readiness to proceed to sea.

Prohibited anchorage.—Anchoring is prohibited in the charted area 1½ miles eastward of Mys Sukhumskiy.

A submarine cable is laid through this area north-westward to Adler; it is landed at Mys Sukhumskiy.

Directions.—The recommended approach course to Sukhumi from westward is 107° for 6·9 miles from a position 42° 58'·2 N., 40° 49'·3 E., thence 057½° for 3·0 miles, and 352½° for 16 cables. From southward the recommended track is 352½° for 9·9 miles from a position 42° 49'·4 N., 41° 03'·4 E.

16-22 Replace by:

...abreast the western part of the town, with a shorter one close eastward. The westernmost pier has a depth of 2·4 m at its outer end. The next pier, for working cargo, is an angled one, projecting about one cable south-eastward and one cable southward, and is the largest of the four, with depths of about 5 m and 6 m at its head. The two eastern piers are used for passenger traffic. Maximum permitted entry draught and length are 7·6 m and 180 m respectively.

A pair of leading lights, in line bearing 352½°, are exhibited from the southern part of the largest pier.

Below the front leading light, coloured lights are exhibited to indicate the direction of the current, a red light denotes a west-going current and a green light an east-going current. A spar buoy off the outer end of the pier, laid on the leading line, is also used to indicate the rate and direction of the current.

Pilotage is compulsory for all vessels except those exempt by law. Pilot boards in position 42° 58'·5 N, 41° 01'·7 E. See *Admiralty List of Radio Signals Volume 6*. Permission must be sought from the Port Director before entering, anchoring or moving in the port area.

The use of sound signals is prohibited in the port area except as required to comply with the *International Regulations for Preventing Collisions at Sea (1972)*.

29-30 *Replace by:*

Fresh provisions are plentiful. Water is laid on to the piers. Oil fuel can be supplied by lighter.

34 *After "a" read "coast and port"*

35-36 *Delete*

405

52 *For "south-eastward" read "south-westward"*

406

26 *Add: For firing practice danger area (No. 741) off this stretch of coast, see Appendix V.*

29 *Add: A light is exhibited from the village of Gagida 6½ miles south-south-eastward of the mouth of Reka Gudava*

407

2 *Replace by:*

...Khobi

For **bombing danger area** (No. 742) off this stretch of coast, *see Appendix V.*

9-10 *Replace by:*

A light is exhibited from a brown rectangular metal framework structure, 13 m in height, on the southern side of the mouth of Reka Khobi.

A stranded wreck lies off the mouth of the river; a light-buoy (W cardinal), is moored 1½ miles westward of the light mentioned above.

38-41 *Replace by:*

Prohibited anchorages.—A dumping ground for explosives, indicated on the charts, lies 16 miles eastward of Redut-Kale, with a disused dumping ground between it and the shore eastward. Anchoring and fishing are prohibited in these areas.

47-50 *Replace by:*

...(18^m3) extends about 1½ miles offshore: three buoys (spar; W cardinal) are moored near the 6 fathom depth contour half a mile southward, one mile west-north-westward and 1½ miles north-westward of the river mouth. Reka Rioni is the largest of the rivers...

52 *Add: An obstruction (sunken metal pontoon), with a depth of 13·5 m over it, lies 1¼ miles north-westward of the head of Zapadnyy mole (42° 09'·6 N., 41° 38'·8 E.).*

408

13 *After "light" insert "and a tower on the harbour office, 28 m in height, on the head of Sredniy mol (page 409)"*

14 *For "radio" read "television"*

23 *Add: For mine practice danger area (No. 789) 3 miles south-south-westward of the harbour entrances; see Appendix V.*

44 *Replace by:*

...removing this silt. In 1987 there were depths of 7·4 m within 30 m each side of the centre line of the channel...

51-55 *Replace by:*

Anchorages.—Anchorage is only permitted in areas No. 421 and 422, the positions of which are shown on the chart.

Prohibited area.—A small prohibited area, indicated on the plan, (No. 112) lies between one and 3 cables westward of the middle of Zapadnyy mol.

409

25-27 *Replace by:*

...from the eastern end of Vnutrenniy basseyn. There are mooring buoys in Yuzhnaya gavan'.

33 *Add:* In 1973, an obstruction, which dries, lay one cable westward of Sredniy mol. Mooring alongside Zapadniy mol in this vicinity is prohibited.

46 *Add:* A light-and-whistle-buoy (safe water), lies on this leading line $2\frac{1}{4}$ miles west-north-westward of the entrance.

A light-buoy (port hand) is moored close north-eastward of the intersection of the two leading lines.

48-53 *Replace by:*

...is exhibited from a white rectangular daymark with a black stripe 7 m in height, situated at the root of Yuzhnyy mol; the rear light is exhibited from Potiyskiy lighthouse. The lights in line bearing 159° , lead through...

56 *Delete* "A white"

410

2-3 *Replace by:*

A light-buoy (N cardinal) is moored one cable north-north-...

6-8 *Replace by:*

...(42 x 10' N., $41^\circ 39'$ E.) the channel is marked by a pair of light-buoys (starboard and port hand). A...

16-17 *Replace by:*

A light is exhibited from a white metal framework tower, 3 m in height, situated on the head of Zapadniy mol.

20-21 *Delete*

33-37 *Delete*

50 *Add:* Both approach routes are indicated on the chart.

411

39 *Add:* A floating dock is available.

44 *After* "a" *insert* "coast and port"

45-46 *Delete*

53 *Replace by:*

...miles south-south-eastward to the small town of Grigoleti at the mouth of Reka Supsa.

Grigoleti light is exhibited from a red metal framework tower with an orange rectangular daymark with a white stripe, 9 m in height, at the northern end of the town, $1\frac{1}{4}$ miles north-north-westward of the river entrance.

Thence the coast trends...

54 *For* "Namenebi" *read* "Natanebi (Namenebi)"

412

3 *For* "Namenebi" *read* "Natanebi"

4 *Add:* Natanebi Light stands $3\frac{1}{2}$ miles N of the mouth of the river.

15 *Add:* Two conspicuous tall buildings stand half a mile apart 2 miles inland about $2\frac{1}{4}$ miles north-eastward of Kobuletskiy light.

19 *Replace by:*

...2 miles N of the town of Kobuleti.

A dumping ground for explosives, shown on the chart, lies 11 miles W of Kobuleti.

413

12 For "Guniye" read "Kalender"

36-37 Replace by:

Prohibited area.—A prohibited area, indicated on the chart, extends west-north-westward for...

48 For "Batumiyskaya" read "Batumskaya"

414

3, 13, 37, 41, 48, 50 For "Batumiyskiy" read "Batumskiy"

4 Add: A conspicuous building, 66 m in height, stands $2\frac{1}{2}$ cables south-south-westward of Mys Burun-Tabiya.

19, 38 For "Batumiyskaya" read "Batumskaya"

26-35 Replace by:

Batumskiy light-and-whistle-buoy (W cardinal) is moored close off the western extremity of the bank. A buoy (spar; N cardinal) is moored on the edge of the bank $1\frac{1}{2}$ cables south-eastward of the light-and-whistle-buoy: two buoys (spar; W cardinal) mark the edge of the bank $1\frac{1}{2}$ and 3 cables southward of the light-and-whistle-buoy.

Two patches of foul ground lie about 2 cables east-south-eastward and $2\frac{1}{2}$ cables...

49 Replace by:

...spar buoys, but over a 13·6 m patch 9 cables northward of the front leading light.

A second pair of leading lights are exhibited about one cable eastward and 2 cables south-eastward, respectively, of the head of Neftyanoy mol. In line, bearing $166\frac{1}{4}^\circ$, they lead from the approach leading line towards the outer tanker berth mentioned on page 415.

415

4-5 Replace by:

Anchorage area No. 425 lies between three quarters of a mile north-north-eastward and 3 miles north-eastward of Mys Batumskiy. Its SE boundary is marked by buoys (N and W cardinal). Anchorage area No. 426 lies between 4 and 7 cables E of Mys Batumskiy.

6 Add: A light-buoy (special) is moored nearly one cable northward of the front leading light-structure.

9, 18 For "Batumiyskaya" read "Batumskaya"

16 Add: A passenger terminal is situated on the western shore opposite the head of Neftyanoy mol.

20-32 Replace by:

...shore of the bay and thence about 3 cables in a westerly direction.

There are two berths for tankers on the southern side of Neftyanoy mol and a buoy berth served by pipelines on the northern side. In 1983 maximum permissible draughts were reported to be 6·7 m and 11·0 m at the inner and outer berths on the southern side and 11·1 m at the buoy berth.

On the southern side of the basin there are 4 berths for the shipment of grain, bauxite and general cargoes.

Fishing vessels berth on the south-western side of the basin.

Kabotazhnaya gavan', or Coaster harbour, lies on the eastern side of a reclaimed area on the north-eastern side of Neftyanaya gavan', on which stand some conspicuous oil tanks, fronted by Zashitnyy mol. Kabotazhnaya gavan' is protected on its eastern side by a mole extending $1\frac{1}{2}$ cables east-north-eastward.

The lights on and near the head of Neftyanoy mol are described on page 414. A light is exhibited from a brown metal framework tower, 6 m in height, on the head of the eastern mole of Kabotazhnaya gavan'.

416

26 **Add: Prohibited anchorage.**—Anchoring and fishing are prohibited in the area shown on the chart, about one mile westward of Mys Burun-Tabiya. The western limit, not shown on the chart, is the meridian $41^{\circ} 36'$ E.

46-52 *Replace by:*

The recommended approach course to Batumi is 149° from a position $2\frac{1}{4}$ miles 329° from Batumiyskiy light for $1\frac{1}{4}$ miles and thence 131° for 9 cables to the alignment of the leading lights.

417

13 *For "are" read "is a 100-ton floating crane, and there are"*

20 *After "a" insert "coast and port"*

21-24 *Delete*

418

21-29 *Delete*

419

28 *Add:*

Pollution of the sea.—Due to the non-tidal nature of these waters, national authorities are extremely rigorous in the application of anti-pollution regulations. See page 15.

33 *After "dere." insert "The harbour is protected by two breakwaters. Lights (concrete towers) stand at the head of each breakwater."*

420

3 *Add:* In 1977 a 250 m-long shelter mole for fishing ws completed in Kefken limani.

28 *Delete "red"*

56 *For "westward" read "eastward"*

421

23 *Add:* A light is exhibited on the coast three-quarters of a mile west-north-westward of the town.

31 *Add:*

Submarine Exercise area.—Submarines exercise in the area, indicated on the chart, northward of Melenagzi. A good lookout should be kept for them when passing through this area; see page 21.

38 *Delete*

43-45 *Replace by:*

In 1982 a jetty was under construction extending 103 m eastward from the breakwater 400 m from its head.

Two mooring buoys, providing...

46 *For "is" read "are"*

48-55 *Replace by:*

The northern and eastern sides of the harbour are quayed. A breakwater extends about one cable south-south-westward and thence one cable westward from a position about $7\frac{1}{4}$ cables east-south-eastward of Baba burnu. From the elbow of this pier an arm extends about 1 cable south-eastward. A light is exhibited from the head of each arm.

The coal wharf on the...

422

10-13 *Replace by:*

...cables south-eastward of the head of the outer mole.

In 1983 the channel leading into Uzunkum harbour was dredged to a depth of 13 m.

14 *For "Ereğli" read "A"*

16 *Delete "A" to "lighthouse."*

423

1 *Replace by:*

Chart 1986, plan of Ereğli

22 *Delete*

38-39 *Delete "A mooring" to "offshore."*

424

26-27 *Delete "A" to "structure".*

425

34 *Add:*

Radio station.—There is a coast radio station at Zonguldak.

49 *For "Filyos" read "Hisarönü (Filyos)"*

426

4 *For "Filyos" read "Hisarönü (Filyos)"*

39 *Replace by:*

Charts 2278, 2238

41-42 *Replace by:*

...areas, indicated on the charts, westward and northward of Demirli burnu. A good lookout should be kept for them when passing through these areas; *see* page 21.

A deep-water dumping ground lies about 68 miles north-north-westward of Demerli burnu.

427

9 *For "Felângit" read "Gökçe (Felângit)"*

16 *Replace by:*

Lights are exhibited, at elevations of 26 feet (7^m9) and 33 feet (10^m1), respectively, from a white...

27 *Add:* Fishing is prohibited within an area about 3 miles square northward of the harbour.

30 *For "Felâgit" read "Gökçe"*

45 *Add: Chart 2238*

52 *For "Gidros" read "Sütlüce"*

428

1 *Replace by:*

Chart 2238

14 *For "Gidros" read "Sütlüce"*

26-31 *Replace by:*

...of Köpekkaya burnu, *see* views [52], [53].

Breakwaters enclose a small harbour on the north-eastern side of the bight. Entry is from southward. Lights are exhibited from the head of each breakwater.

A light is exhibited...

429

- 3-4 *Delete* "The" to "charted."
 27 *For* "one cable" *read* "3 cables"
 33 *Delete* ", at an elevation of 33 feet (10^m1),"

430

- 41 *For* "Başyoz" *read* "Başkaya (Basyoz)"
 45 *For* "Başyoz" *read* "Başkaya"
 46 *For* "Hamsilos (Hamsaros)" *read* "Hamsi"

48-49 *Replace by:*

...of Ak-liman. Hamsi limanı lies about 4 cables west-...

- 50 *For* "Hamsilos" *read* "Hamsi"

431

47-50 *Replace by:*

...half a cable offshore.

A pier used by ferries, 200 m long and 10 m wide, extends SE from the old stone jetty below the fort. Length of berth 100 m, Max draught 7·5 m. A light stands at the head of the pier.

A mole extends 500 m W and SW from the head of the old stone jetty. Berths on the inner side of this mole have depths of between 3 and 4·5 m.

432

30 *Add:* Lights are exhibited from the heads of two breakwaters enclosing a small harbour at Yakakent, 21 miles westward of Bafra burnu.

433

5 *Add:* A light is exhibited, at an elevation of 46 feet (14^m0), from a white metal framework structure, 39 feet (11^m9) in height, at Incir burnu.

24-27 *Replace by:*

A light is exhibited from the head of a short pier extending northward from the head of the bay, close northward of the conspicuous derrick mentioned below.

34-35 *Replace by:*

...of trees, also assist in identifying it.

42 *Add:* Another similar pipeline, marked by a small buoy, lies one mile farther eastward.

52-55 *Replace by:*

The outer harbour limits are Lat. 41° 21' N.

56 *Delete*

434

2-6 *Replace by:*

There are depths of from 36 feet (11 m) to 40 feet (12 m) in the entrance and in the northern part of the inner basin: depths are continually changing.

16-23 *Replace by:*

On the western side of the harbour a jetty projects about 2 cables south-eastward from a position 4½ cables southward of Kalyon burnu. There are berths on the south-western side of this jetty and quays extend 4½ cables southward from the root of the jetty.

There is a mooring buoy off a spur on the north-eastern side of the jetty.

A light is exhibited from a white concrete tower on the jetty head.

40-41 *Replace by:*

The general anchorage lies in the outer harbour eastward and northward of the entrance; it is exposed to winds from between north-west-...

46 *Replace by:*

...water. Yachts and small craft...

435

22 *Add:*

Radio station.—There is a coast radio station at Samsun.

23 *Add:* Chart 2237

Azot Sanayi, a terminal for discharging phosphates and liquid chemicals, is situated on the southern shore of Samsun Körfezi, 6 miles eastward of Samsun. A conspicuous red and white chimney, surrounded by a framework structure, stands at the fertilizer factory, close inland.

A pier, 540 m long, extends northward from the shore at a point near the chimney: a light is exhibited on its extremity. The berth on the eastern side of the pier, at its outer end, is about 150 m long and is used for discharging liquid chemicals. Depths alongside are 6·7 m at its inner end and 15·8 m at its outer end. A sandbank, is reported to lie 50 m eastward of the pier. A similar berth on the western side of the pier is used for discharging phosphates. Depths alongside are reported to be 7·6 m at its inner end and 15·5 m at its outer end.

A pumping station platform projects about 3 m on each side of the pier at the inner end of the berths and care must be taken not to foul the pumphouse, which is 5 m in height, when berthing and unberthing.

A moderate groundswell may be felt at the pier and a vessel should be prepared to depart at the onset of strong onshore winds or worsening swell. Berthing in anything but light winds should be avoided. Night berthing is not permitted.

Pilotage and tugs are not available.

Water is available at the pier.

Anchorage.—Vessels anchor about 1½ miles north-north-eastward of the pierhead in a depth of 13 fm (24 m)

28 *For* "Fashane" *read* "Taşkana (Fashane)"

33 *Add:* A deep-water dumping ground for explosives and inflammable materials lies 77 miles northward of Çalti burnu.

42, 45, 50, 55 *For* "Fashane" *read* "Taşkana"

436

5, 16 *For* "Fashane" *read* "Taşkana"

41-43 *Replace by:*

...mosque which is prominent from seaward. *See* view [62].

A jetty extends 150 m north-eastward from the north-western part of the town and there is a small harbour, protected by two breakwaters, about three-quarters of a mile farther north-westward. In its outer half there are charted depths of 5 to 6 m. A light is exhibited at the head of each breakwater.

437

20-21 *Delete*

28 *Add:* A light is exhibited from the head of a small breakwater extending northward from the coast at Persembce.

46 *Add:* A light is exhibited from a concrete tower on Bozuk kale.

48-50 *Read...* Bostopeköy. A jetty, with reported depths of 8·3 m alongside its head, fronts the north-western extension of the town. A number of lighters are available. In...

438

9 *Add:* Piraziz light is exhibited from a small headland 2 miles eastward of a village of that name, and 2 miles west-north-westward of Bozarsuyu river mouth.

10 *For* "Ayvasil" *read* "Ayvali (Ayvasil)"

15, 21, 24 *For* "Ayvasil" *read* "Ayvali"

37-39 *Replace by:*

Giresun light is exhibited, at an elevation of 111 m, from a white metal framework tower, 12 m in height, situated about 1½ cables south-south-westward of the northern extremity of the promontory.

439

2 *For* "'position of'" *read* "position on"

13 *Add:* There are berths to anchor, with stern secured to bollards on the northern breakwater.

14-17 *Delete*

20-21 *Replace by:*

Regulations.—Visiting warships and tourist ships must give 48 hours notice of arrival with confirmation that they need alongside, stern-to or anchor berth.

Dangerous cargoes are only worked in daylight; but oil fuel can be worked at any time.

Vessels entering must give way to vessels leaving.

Discharge of ballast and refuse is forbidden within the harbour limits.

Ships must have steam at four hours notice in the inner harbour.

Vessels anchoring in the outer harbour should signal their berth to the harbour authorities.

28 *For* "2¼ cables" *read* "400 m"

33 *After* "deresi," *insert* "about one mile eastward of the harbour."

440

15 *Replace by:*

...of Özlüce (Gelevar) deresi.

19 *For* "Kilise" *read* "Kiliç (Kilise)"

25, 35 *For* "Kilise" *read* "Kiliç"

36-38 *Replace by:*

...it is reported (1988) that the E cove is sheltered by a breakwater and that the harbour formed can accommodate medium sized fishing vessels.

47 *After* "about" *insert* "another"

52 *Add:* A light is exhibited from a structure on Kale burnu.

54 *Add:* A light is exhibited from the head of a small breakwater extending north-eastward from the coast at Görele.

441

29 *Add...*, which is protected by a short mole, extending eastward from the coast.

A light is exhibited at the head of the mole.

30 *Delete*

442

24 *For* "breakwater" *read* "Main Mole"

26 *After* "light-structure" *insert* ", thence eastward for a further 1000 feet (300 m)"

27-28 *For* "A second breakwater" *read* "Secondary Mole"

29 *For* "northern breakwater" *read* "Main Mole"

31 *Delete* "Büyük liman or"

34 For "Eleusa Burnu breakwater" read "Small Mole"

37 For "Büyük liman" read "Inner Harbour"

42-44 Replace by:

A light is exhibited from a metal framework tower on the head of Secondary Mole.

46-48 Replace by:

...framework tower, 13 feet (4^m0) in height, situated on the head of Small Mole.

50-51 Replace by:

...Inner Harbour extends 1312 feet (399^m9) south-south-westward from close southward of the root of Main Mole; it has berths for two...

56 Replace by:

...4 cables westward of the light on the head of Small Mole.

443

2 For "Eleusa Burnu Breakwater" read "Main Mole"

3 For "breakwater" read "mole"

5-6 Delete

8 For "Büyük" read "Inner Harbour"

12 For "the breakwater of Küçük liman" read "Small Mole"

18-21 Replace by:

Prohibited anchorage.—**Anchorage.**—Anchorage is prohibited in the approaches to Trabzon in the area indicated on the chart.

23-24 For "Büyük liman" read "Inner Harbour"

25-26 For "6 cables north-eastward of the head of the northern breakwater" read "7 cables east-north-eastward of Main Mole"

45 Replace by:

Limited supplies of fuel oil are available.

50 For "Eleusa Burnu Breakwater" read "Small Mole"

56 Add: **Radio station.**—There is a coast radio station at Trabzon.

444

4 For "Hupsi" read "Hopsi"

8 For "half a mile" read "2 cables"

14 Replace by:

...of Kalafa deresi. A submerged pipeline extends north-eastward from the shore in Kovata limanı; a white conical buoy marks its seaward end. There is a sandy beach near the mouth of Kalafa deresi...

31 Add: A light is exhibited from the head of a small breakwater extending north-eastward from the coast in Sürmene koyu, 7 miles east-south-eastward of Arakli burnu.

32-34 Replace by:

A light is exhibited, at an elevation of 115 feet (35^m0), from a white metal framework tower, 39 feet (11^m9) in height, about one mile westward of Arakli burnu. A jetty extends from the shore at the W end of the town.

445

5 Add: A small harbour lies close eastward of Priyos burnu. An angled breakwater extends 4 cables eastward from the point, with a short mole projecting north-eastward from the coast 3 cables south-eastward. The western corner of the harbour is quayed. A short pier extends eastward from the town three-quarters of a mile south-south-eastward.

7 Add: Lights are exhibited from the heads of the angled breakwaters and short mole, and from the pierhead three-quarters of a mile south-south-eastward.

15-19 *Replace by:*

Facilities.—Fresh provisions can be obtained.

446

9 *For* “Peronit” *read* “Camli (Peronit)”

15, 22, 26, 31 *For* “Peronit” *read* “Camli”

14-20 *Replace by:*

Hopa.—Port.—Facilities.—Hopa, which in 1978 had a population of 9000, is situated on the coast about 4 mile ENE of Peronit Burnu.

In 1980 a new port, which lies 1 mile N of the town, was nearing completion. Its harbour is protected on its W side by an angled breakwater projecting nearly 1 mile NW and NNE and on its N side by a breakwater which extends 2½ cable WNW from the shore.

Lights are exhibited from the head of each breakwater.

Within the inner harbour, which has an entrance 1 cable in width, the main berths extend from the shore on the E side of the harbour and in 1980 there were two berths that could accommodate vessels 200 m in length, with a draught of 10 m.

Pilotage is compulsory and pilots embark outside the harbour entrance. Tugs are available and are compulsory for foreign merchant vessels of 500 grt or more.

Facilities and Supplies.—Cranes, maximum capacity 25 tons; hospital; provisions; fresh water. There is sea communications with Istanbul.

Trade.—Exports. Timber; minerals. Transit trade to Iran and Iraq.

Camli Burnu Light is exhibited, at an elevation of 75 ft (22^m9) from a white...

28 *Add:* Two lights are exhibited at Hopa, about 4½ mile north-east of Camli (Peronit) burnu.

38 *Add:* Leading lights at Sarpi, in line bearing 110°, mark the seaward extension of the boundary.

448

Constanța Col. (13) *Add:* In 1976 it was reported that a dry dock for vessels up to 100 000 ton was available.

450

Port Tuapse Col. (1) *Read* Two floating docks

Col. (14) *Read* 15 000 tons
6000 tons.

451-457

Appendix II. Reference should be made to the latest information on each port, as given in the foregoing pages of this supplement.

458

Preface *For* “United Kingdom Chamber of Shipping” *read* “General Council of British Shipping”

458-459

insert new Appendix V.

APPENDIX V

U.S.S.R. REGULATED AREAS

(See page 14)

AREAS DESIGNATED PERIODICALLY DANGEROUS TO NAVIGATION

Details of these areas are promulgated in U.S.S.R. Notice to Mariners.

The position given below refer to Russian charts. The geographical graduation of some Admiralty charts differ from the Russian charts. This difference of graduation is given on the Admiralty charts and should be applied where relevant.

Areas, periodically dangerous for navigation, including firing practice, bombing, mine practice and similar areas, are dangerous only for the period during which the dangerous operations are being carried out.

The times during which these areas are dangerous for navigation are broadcast as PRIPS and NAVIPS. These navigational warnings will be broadcast 3-5 days before the start of dangerous operations and repeated each day until their completion. See *Admiralty List of Radio Signals, Vol. 5*.

N.E. OF BUKHTA ZHEBRIYANSKAYA. Charts 2213, 2835

Area No. 700 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	45° 34'·6	29° 43'·1
2	45° 37'·6	29° 48'·8
3	45° 35'·7	29° 50'·5
4	45° 32'·8	29° 45'·2

S OF MYS SYCHAVSKIY. Chart 2212

Area No. 702 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	46° 26'·6	31° 10'·0
2	46° 25'·6	31° 12'·6
3	46° 25'·0	31° 12'·6
4	46° 25'·0	31° 10'·0

KINBURNSKAYA KOSA. Chart 2212

Area No. 704 bounded by the shore and lines joining:

Point No.	Lat. N.	Long. E.
1	46° 30'·9	31° 35'·6
2	46° 30'·0	31° 34'·5
3	46° 30'·8	31° 33'·1
4	46° 31'·7	31° 34'·2

W END OF TENDROVSKAYA KOSA. Chart 2212

Area No. 705 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	46° 15'·5	31° 31'·2
2	46° 18'·0	31° 31'·2
3	46° 18'·0	31° 35'·0
4	46° 15'·5	31° 35'·0

W OF TENDROVSKAYA KOSA. Chart 2212

Area No. 706 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	46° 13'·8	31° 06'·8
2	46° 17'·8	31° 12'·8
3	46° 11'·5	31° 19'·2
4	46° 08'·4	31° 14'·5

SW OF MYS TARKHANKUT. Chart 2232

Area No. 708 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	44° 23'·0	30° 22'·0
2	44° 57'·0	30° 34'·0
3	44° 57'·0	31° 30'·0
4	44° 23'·0	31° 20'·0

Area No. 709 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	44° 23'·0	30° 22'·0
2	44° 57'·0	30° 34'·0
3	45° 44'·0	31° 24'·0
4	44° 58'·0	32° 30'·0
5	43° 58'·0	31° 28'·2

SW OF MYS YEVPARORIYSKIY. Chart 2233

Area No. 714 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	45° 03'·6	32° 58'·6
2	45° 06'·8	32° 58'·6
3	45° 05'·0	33° 11'·2
4	45° 01'·5	33° 11'·2
5	45° 01'·5	33° 01'·3

SEVASTOPOL'SKAYA BUKHTA TO MYS LUKULL. Charts 2232, 2233

Area No. 721 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	44° 39'·0	33° 32'·4
2	44° 40'·0	33° 11'·0
3	44° 52'·0	32° 55'·0
4	44° 59'·0	33° 03'·0
5	44° 50'·4	33° 33'·3

SW OF MYS KHERSONES. Chart 2214

Area No. 724 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	44° 00'·0	31° 30'·2
2	44° 58'·0	32° 30'·0
3	43° 55'·0	33° 55'·0
4	43° 11'·5	33° 31'·0

Area No. 725 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	44° 00'·0	32° 13'·0
2	44° 36'·0	32° 13'·0
3	44° 36'·0	32° 59'·8
4	44° 32'·8	33° 04'·0
5	44° 00'·0	33° 04'·0

S OF MYS KHERSONES. Charts 2232, 2233

Area No. 726 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	44° 24'·1	33° 15'·0
2	44° 26'·2	33° 18'·0
3	44° 24'·2	33° 20'·8
4	44° 22'·0	33° 17'·7

S OF MYS SARYCH. Chart 2233

Area No. 727 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	44° 18'·0	33° 09'·0
2	44° 18'·0	34° 00'·6

3	44° 00'·0	34° 00'·6
4	44° 00'·0	33° 09'·0

SE OF MYS AYTODOR. Chart 2233

Area No. 730 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	43° 41'·0	34° 19'·0
2	44° 00'·0	34° 19'·0
3	44° 00'·0	35° 00'·0
4	43° 41'·0	35° 00'·0

MYS AY-FOKA TO MYS KYZ-AUL. Chart 2233

Area No. 731 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	44° 38'·5	34° 52'·0
2	44° 36'·5	35° 11'·0
3	44° 46'·0	35° 24'·0
4	44° 53'·0	36° 25'·7
5	44° 21'·9	36° 25'·7
6	44° 18'·8	35° 00'·0
7	44° 21'·3	34° 52'·0

S OF KERCHENSKIY PROLIV. Chart 2216

Area No. 736 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	44° 53'·1	36° 33'·8
2	44° 56'·4	36° 33'·5
3	44° 57'·1	36° 40'·0
4	44° 54'·0	36° 40'·0

SW OF PORT NOVOROSSIYSK. Chart 2235

Area No. 738 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	44° 00'·0	36° 49'·0
2	44° 12'·0	37° 16'·0
3	43° 56'·0	37° 40'·0
4	43° 42'·0	37° 15'·0

PORT SOCHI TO PORT POTI. Chart 2235

Area No. 740 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	43° 10'·0	39° 24'·0
2	43° 22'·0	39° 40'·0
3	43° 01'·0	40° 09'·0
4	42° 50'·0	40° 44'·0
5	42° 24'·0	41° 05'·0
6	42° 28'·0	40° 26'·0

S OF PORT OCHAMCHIRE. Chart 2263

Area No. 741 bounded by the shore and lines joining:

Point No.	Lat. N.	Long. E.
1	42° 29'·6	41° 32'·0
2	42° 23'·1	41° 24'·2
3	42° 37'·4	41° 14'·4
4	42° 37'·2	41° 30'·1

MYS ANAKLIYA. Chart 2263

Area No. 742 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	42° 18'·1	41° 37'·6
2	42° 15'·7	41° 29'·4
3	42° 21'·8	41° 25'·2
4	42° 22'·4	41° 33'·6

SEA OF AZOV—W PART. *Chart 2234*

Area No. 760 bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	45° 44'·0	35° 30'·0
2	45° 58'·0	35° 30'·0
3	45° 58'·0	36° 07'·0
4	45° 44'·0	36° 07'·0

BELOSARAYSKIY ZALIV. *Chart 2234*

Area No. 761 bounded by the shore and lines joining:

Point No.	Lat. N.	Long. E.
1	46° 52'·5	37° 02'·8
2	46° 49'·9	37° 15'·2
3	46° 47'·5	37° 12'·8
4	46° 36'·5	36° 53'·6
5	46° 37'·2	36° 49'·8
6	46° 49'·7	36° 55'·6

PORT YEYSK TO KOSA DOLGAYA. *Chart 2234*

Area No. 763 bounded by the shore and lines joining:

Point No.	Lat. N.	Long. E.
1	46° 39'·6	37° 47'·3
2	46° 46'·0	37° 45'·4
3	46° 53'·6	37° 58'·4
4	46° 42'·8	38° 15'·2

SW OF PORT POTI. *Chart 2263*

Area No. 789 (mine practice) bounded by lines joining:

Point No.	Lat. N.	Long. E.
1	42° 07'·15	41° 36'·45
2	42° 07'·85	41° 37'·52
3	42° 07'·40	41° 38'·40
4	42° 06'·21	41° 36'·90

**AREAS DESIGNATED PERIODICALLY PROHIBITED TO
NAVIGATION AND FORTIFIED ZONES**

There are at present no areas of these types within the geographical area of this volume.

APPENDIX VI**BULGARIAN REGULATED AREAS**

Bulgarian regulated areas where navigation, fishing and anchoring is prohibited, are normally charted and referred to in Sailing Directions. Areas where navigation, fishing and anchoring are only periodically declared to be dangerous are not charted and full details are given below.

The positions below refer to Bulgarian charts which use the same geographical datum as Russian charts. The difference in graduation between some Admiralty charts and Russian charts should be applied where relevant (*See Appendix V*).

The times during which these areas are dangerous for navigation, fishing or anchoring are announced by radio navigational warning 3 to 5 days before the start of dangerous operations.

AREAS DESIGNATED PERIODICALLY DANGEROUS TO NAVIGATION

ENTERING FROM SE ZALIV VARNENSKI.

Area No. 41 limits defined by line joining points:

Point No.	Lat. N.	Long. E.
1	42° 59'·00	28° 11'·50
2	42° 16'·00	28° 46'·20
3	42° 59'·50	29° 01'·20
4	42° 35'·00	28° 11'·50

ENTERING FROM NE ZALIV VARNENSKI.

Area No. 42 limits defined by line joining points:

Point No.	Lat. N.	Long. E.
1	43° 16'·00	28° 46'·20
2	43° 32'·30	29° 19'·50
3	43° 08'·50	29° 19'·50
4	42° 59'·50	29° 01'·20

ENTERING FROM E ZALIV BURGASKI

Area No. 43 limits defined by line joining points:

Point No.	Lat. N.	Long. E.
1	42° 39'·00	28° 28'·00
2	42° 39'·00	29° 22'·00
3	42° 19'·00	29° 22'·00
4	42° 19'·00	28° 28'·00

ENTERING FROM SE ZALIV BURGASKI.

Area No. 44 limits defined by line joining points:

Point No.	Lat. N.	Long. E.
1	42° 19'·90	28° 03'·40
2	42° 23'·60	28° 05'·80
3	42° 10'·00	28° 18'·00
4	42° 08'·00	28° 14'·00

E OF PORT MIČURIN.

Area No. 45 limits defined by line joining points:

Point No.	Lat. N.	Long. E.
1	42° 15'·33	28° 07'·45
2	42° 38'·17	28° 33'·70
3	42° 19'·40	28° 50'·95
4	42° 09'·45	28° 12'·75

Meteorological rockets are fired in this area.

Note: In an area within 60 km of 42° 15'·15 N., 28° 15'·15 E., scientific equipment is dropped by parachute.

AREAS DESIGNATED PERIODICALLY DANGEROUS FOR ANCHORING AND FISHING N OR MASLEN NOS.

Area No. 51 limits defined by line joining points:

Point No.	Lat. N.	Long. E.
1	42° 20'·14	27° 47'·24
2	42° 21'·94	27° 47'·24
3	42° 21'·94	27° 49'·94
4	42° 18'·54	27° 49'·94
5	42° 18'·54	27° 47'·74

S OF ČERNI NOS.

Area No. 52 limits defined by coastline and line joining points:

Point No.	Lat. N.	Long. E.
1	42° 53'·47	27° 53'·92
2	42° 54'·47	27° 54'·12
3	42° 54'·79	27° 54'·12
4	42° 54'·79	27° 53'·88

E OF NOS SĀBLA.

Area No. 53 limits defined by line joining points:

Point No.	Lat. N.	Long. E.
1	43° 30'·0	28° 50'·0
2	43° 37'·0	29° 16'·5
3	43° 33'·0	29° 18'·5
4	43° 23'·0	28° 48'·0

NEW AND ALTERED NAMES

The following list gives new names and alterations in old names which will be adopted in all Hydrographic publications affected, as opportunity occurs:

New or altered name	Page of Pilot	Obsolete name
Adaardi burnu	105	Liman burnu
Akça adası	119	Fatih or Halko adası
Akça limanı	119	Fatih limanı
Arnavutköy burnu	124	Arnavut burnu
Artek light	287	—
Ayvalı burnu	438	Ayvasıl burnu
Azot Sanayi, Terminal	435	—
Başkaya burnu	430	Başyoz burnu
Batumsкая	413-414	Batumiyskaya
Beyaz burnu	117	Beyazburun
Camlı burnu	446	Peronit burnu
Dalyan bankı	94	Abidos bankı
Dambouy, Ostrovka	216	—
Dneprobugskiy	244	—
Domuz burnu (Marmara)	117	—
Družba oil jetty	176	—
Ekimlik Femeri	114	Hayırsızada
Esen	170-171	Malatra
Essence limanı	124	Eskel limanı
Gökçe burnu	427	Felângit burnu
Grigoleti	411	—
Güvem	166	Uzunye
Hamsi burnu	430	Hamsilos (Hamsaros) burnu
Hamsi limanı	430	Hamsilos liman
Hisarönü	425	Filyos
Hopsi	444	Hupsi
İğneada limanı	171	—
Inci burnu	149	—
Intepe	88	Ereköy
Intepe limanı	88	Ereköy liman
Isıklı burnu	165	Kelagra burnu
Kalender	413	Guniye
Kam Kapu	140	—
Kapsül burnu	120	Kapsala burnu
Karaburun (40° 28' N., 27° 17' E.)	109	İnceburun
Kargaburun	105	—
Kepez burnu	88	Dalyan burnu (40° 06' N., 26° 22' E.)
Kiliç burnu	440	Kilise burnu
Kiyiköy	161	Midye (Midiah)
Kocaburun	103	Koca burnu
Kubanskiy light	374	—
Kumkale burnu	86	Kum burnu
Kumkapi	140	—
Kumköy	163	Kilyos
Laz burnu	143	—
Lazurnoye	256	Novo-Alekseyevka
Leander tower	148	—

NEW AND ALTERED NAMES—*continued*

New or altered name				Page of Pilot	Obsolete name
Leselidze light	..	..	..	399	—
Luzanovskiy light	..	..	..	220	—
Marmara Ereğlisi	..	..	..	106	Marmaraereğlisi
Maymun	..	..	..	114	Büyükmaymun
Mersin burnu	..	..	..	128	—
Natanebi	..	..	..	412	Namanebi
Ocaklar liman	..	..	..	116	Konya liman
Özlüce deresi	..	..	..	440	Gelevar deresi
Periboina	..	..	..	193	—
Peschanyy	..	..	..	260	Kyln Murun
Piraziz	..	..	..	438	—
Portița, Gura	..	..	..	193	Portiței, Gura
Poyraz koyu	..	..	..	10, 92	Kilya koyu
Prences adaları	..	..	..	144, etc.	Kizil adalar
Provinskiy	..	..	..	209	Prorvinsky
Romania	..	..	..	Through	Rumania
				-out	
Rybachiy light	..	..	..	289	—
Sinoe, Lacul	..	..	..	193	
Sukhumskiy	..	..	..	402-404	Sukhumiyskiy
Sülüce	..	..	..	96	Galata
Sütlüce liman	..	..	..	427	Gidros liman
Tamanskiy leading lights	..	..	..	311	Akhilleonskiy leading lights
Taşkana burnu	..	..	..	438	Ayvasil burnu
Topağaç limanı	..	..	..	118	Kızak limanı
Türkeli adası	..	..	..	113	Avşar adası
Tütünciftlik complex	..	..	..	132	—
Tuz burnu (Gemlik körfezi)	..	..	..	126	Tuzla burnu
Ust-Danaysk	..	..	..	209	—
Yakakent	..	..	..	432	—
Varna Zapad	..	..	..	184	—
Yigitler geçiti	..	..	..	114	Araplar geçiti

30° 35° 40°

INDEX TO ADMIRALTY CHARTS ALLUDED TO IN THIS WORK

A number against the name of a place shows a separate plan is published bearing that number

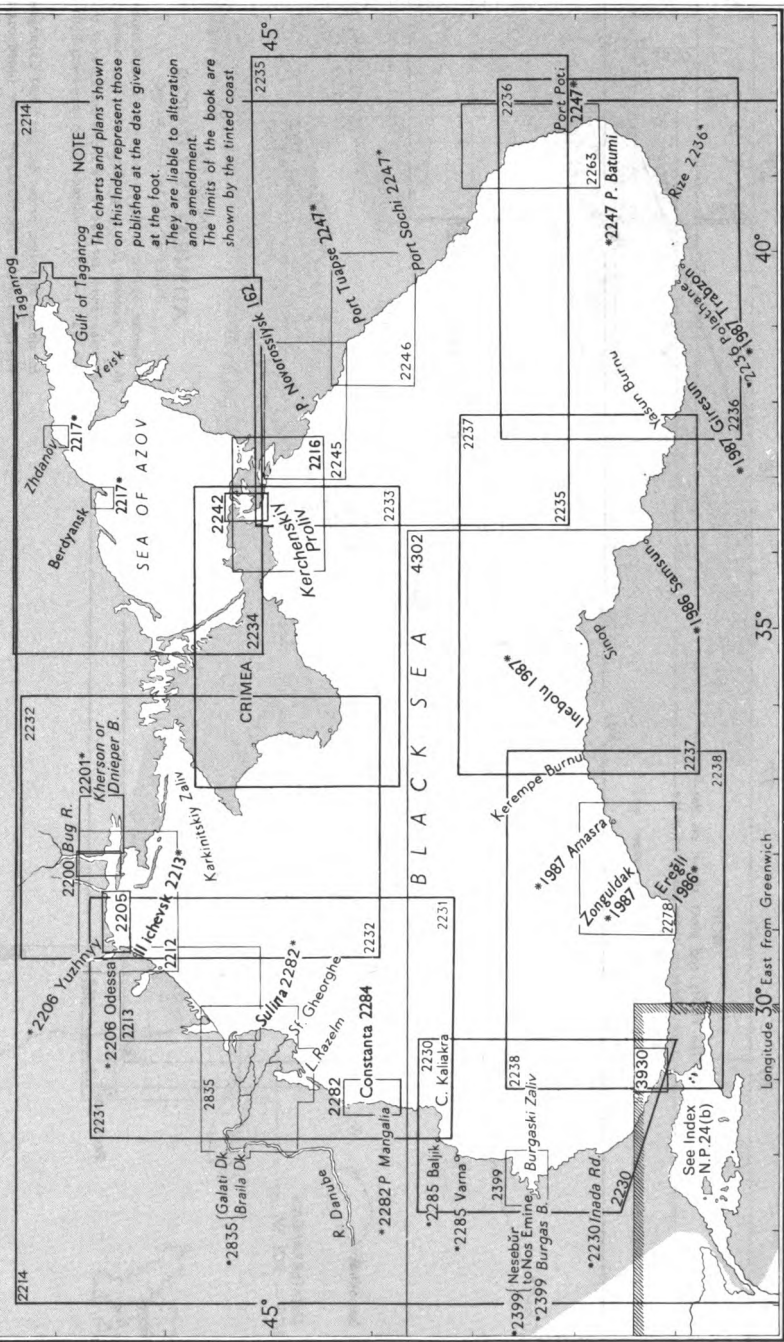
*2236 indicates that a plan of the place against which it is written is given upon sheet 2236

For details of scales, prices &c. see Chart Catalogue.

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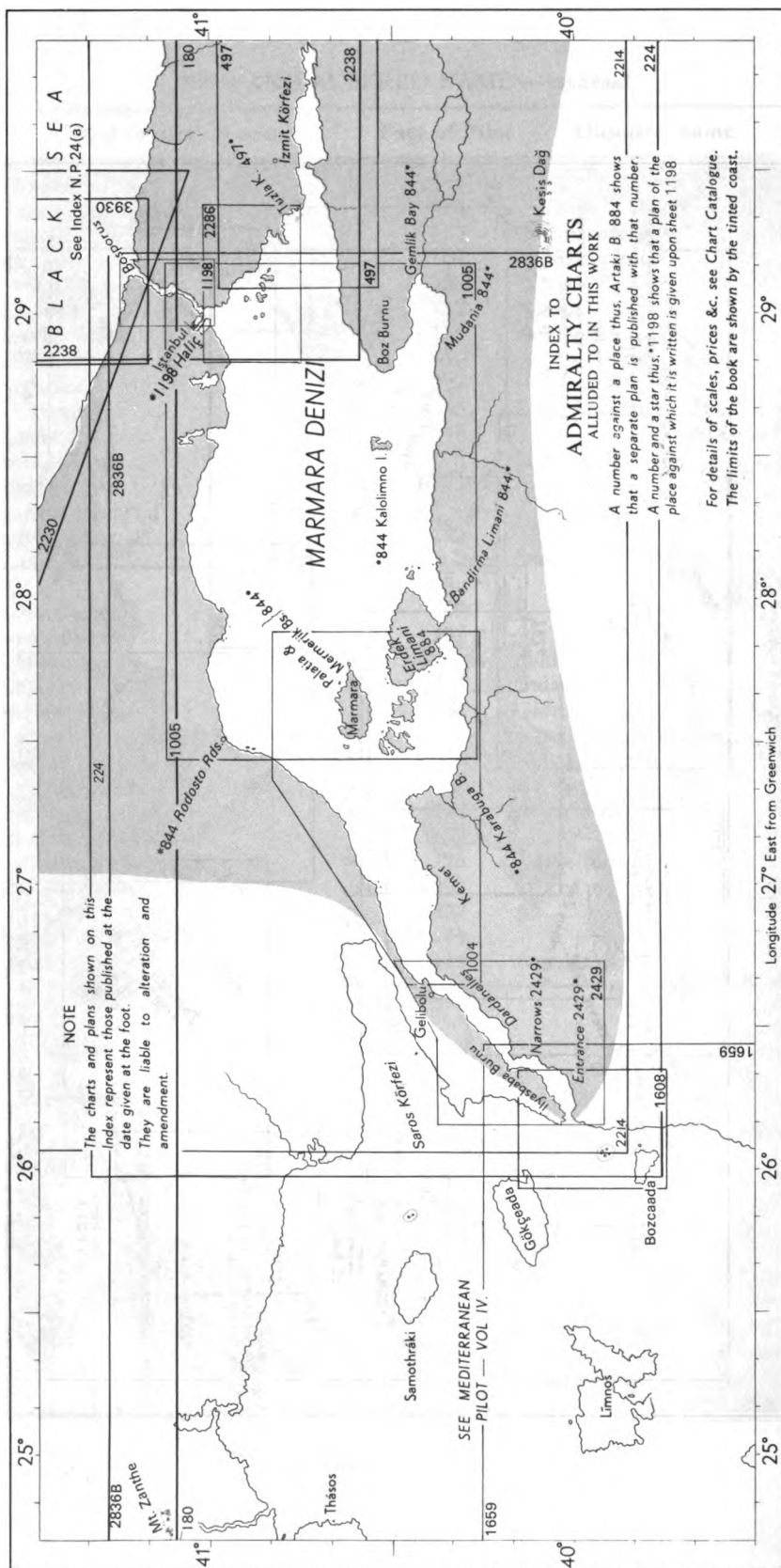
For details of scales, prices &c. see Chart Catalogue.



Black Sea Sea Pilot

February 1989

N.P.24(a)



N.P.24(b)

